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LITTLE SNAKE
RESOURCE MANAGEMENT PLAN
and
RECORD OF DECISION

U.S. Department of the Interior
Bureau of Land Management
Craig District, Colorado
Little Snake Resource Area

June 1989

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RECORD OF DECISION

LITTLE SNAKE RESOURCE MANAGEMENT PLAN

Moffat, Rio Blanco, and Routt Counties, Colorado

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CRAIG DISTRICT
LITTLE SNAKE RESOURCE AREA

Record of Decision
Little Snake Resource Management Plan

This document records the decisions reached by the Bureau of Land Management (BLM) for managing 1.3 million surface acres of public land and 2.4 million subsurface acres (including those beneath the 1.3 million surface acres) in the Little Snake Resource Area.

DECISION

The decision is hereby made to approve the resource management plan (RMP) for the Little Snake Resource Area. This plan was prepared under the regulations for implementing the Federal Land Policy and Management Act (FLPMA) of 1976 (43 CFR 1600). An environmental impact statement (EIS) was prepared for this plan in compliance with the National Environmental Policy Act (NEPA) of 1969. This plan is identical to the one set forth in the Revised Proposed Little Snake Resource Management Plan published in October 1988 and the associated final environmental impact statement published in September 1986.

Language has been added to the management action section for recreation and to management units 10A and 11A to show that in a later amendment to the plan, BLM will study the Yampa River for suitability for designation under the Wild and Scenic Rivers Act. That language also states BLM will take no actions nor approve any actions during the interim which would detract from the values which qualify the river for consideration under the Wild and Scenic Rivers Act.

The RMP describes management prescriptions for seventeen management units within the Little Snake Resource Area. The management unit descriptions also contain the geographical location, the acreage, and the management objective of the unit. Major decisions made in the RMP are:

- Approximately 636,800 acres (containing an estimated 5.8 billion tons of coal) are available for further consideration for coal leasing.
- The resource area is open to oil and gas leasing with various stipulations attached except for 36,240 acres proposed as wilderness which would be closed to leasing if the area is designated as wilderness by Congress.
- Public land is open to locatable mineral entry and development, except for 50,321 acres proposed as wilderness which would be closed to locatable mineral entry if these areas are designated as wilderness by Congress.
- Full livestock preference is authorized until completion of monitoring studies.
- Wildlife habitat is provided for mule deer, elk, pronghorn, and bighorn sheep with no requests for adjustments in numbers until completion of monitoring studies.
- Four areas of critical environmental concern, totaling 22,530 acres, are designated to protect sensitive plants, scenic qualities, archaeological history, and threatened and endangered species. The four areas are Cross Mountain Canyon ACEC (3,000 acres), Irish Canyon ACEC (11,680 acres), Limestone Ridge ACEC/RNA (1,350 acres), and Lookout Mountain ACEC (6,500 acres).
- Soil and water resources are protected by special stipulations applied to surface-disturbing activities.
- Diamond Breaks (36,240 acres) and Cross Mountain (14,081 acres) WSAs are recommended to the Secretary of the Interior as suitable for designation as wilderness.
- Little Yampa/Juniper Canyon (19,840 acres) is administered as a special recreation management area. Wild Mountain (21,000 acres), Cedar Mountain (880 acres), and two areas on Cold Spring Mountain (27,000 acres) are managed for recreation values.

ALTERNATIVES

Initially, five alternatives were analyzed: Current Management (No Action) Alternative, Energy and Minerals Alternative, Commodity Production Alternative, Renewable Resource Alternative, and Natural Environment Alternative. A minimum management alternative was considered. This alternative was eliminated from detailed study because it was not a realistic, implementable alternative, nor did it meet the requirements of FLPMA. The potential impacts to the environment and nearby communities were assessed for each alternative and the results were presented to BLM management. Then, based on this analysis, BLM policy and goals, and the responsiveness of each alternative to the issues identified at the beginning of the process, a preferred alternative was described and the environmental consequences of that alternative were predicted.

The Current Management Alternative was the "No Action" alternative. It reflected the current management of the Little Snake Resource Area and portrayed how it would continue to be managed under existing management policy and practices.

The Energy and Minerals Alternative emphasized the production and development of energy and other mineral resources. Energy resources, minerals of high interest, rights-of-way, and other support actions were favored to meet nationwide needs for energy and minerals.

The Commodity Production Alternative emphasized both mineral and livestock production from public lands.

The Renewable Resource Alternative emphasized the production and management of renewable resources. It maximized the sustained yield of renewable goods and services from public lands to meet local, regional, and national needs.

The Natural Environment Alternative emphasized the protection and enhancement of the natural environment and resources of substantial scientific interest. It favored management and uses that do not detract from the natural setting. This was the environmentally preferable alternative.

The Preferred Alternative provided an optimum multiple-use mix by balancing conflicts and providing a variety of uses. It provided the necessary constraints for protecting renewable resources from irreversible decline, while accommodating production of minerals, livestock grazing, off-road vehicles, recreation, and other uses.

The proposed plan was then developed from: 1) issues raised throughout the multiple-use land planning process, 2) decision criteria, 3) public input received during the 90-day comment period and at the meetings and workshops on the RMP/EIS, and 4) the environmental analyses developed on the six alternatives. Under the proposed plan, use of forage and other natural resources was refined and optimized, energy sources were available, and other critical resource values such as wildlife; cultural resources; and threatened, endangered, and sensitive species were protected.

MANAGEMENT CONSIDERATIONS

The Proposed Plan received four letters of protest which have been resolved by the BLM Director. Several issues were raised in these letters and are summarized below. One protesting party was concerned about the implications of the proposed designation of the Little Yampa/Juniper Canyon area as a Special Recreation Management Area (SRMA) on existing rights associated with coal mining activities, including maintenance of facilities and rights-of-way, and the development of present (and future) coal leases. Another protesting party was concerned the SRMA designation (and the wilderness suitability recommendation) prejudiced the prior withdrawal of the Little Yampa/Juniper Canyon sites for hydropower purposes. Language has been incorporated to make it clear that valid existing rights are unaffected and that necessary maintenance of existing coal mining facilities within the upper unit of the SRMA is compatible with the plan. New public lands rights-of-way will be processed where they are associated with development of the nearby Iles Mountain coal lease tracts and are otherwise in conformance with the RMP. Also, administering the Yampa River corridor for recreation will have no effect on prior hydropower withdrawals since this management will not preclude the possibility of constructing a dam or reservoir in the Little Yampa/Juniper Canyon.

The recommendation of the Cross Mountain Wilderness Study Area (WSA) as "preliminarily suitable" was rasied as an issue, primarily because the protesting party believed the change in the recommendation between draft and final had not had sufficient public review. The rationale for the recommendation and the public review and comment upon which it is based were explained to the protesting party. Also, the quesiton of reserved water rights in wilderness areas, another protest issue, was not addressed because Congress takes that matter into consideration when considering wilderness legislation. (Wilderness recommendations may not be protested since Congress makes the final decision about wilderness designation).

The plan to continue applying the wilderness interim management policy on areas with wilderness characteristics under Section 202 of the Federal Land Policy and Management Act (FLPMA) adjacent to similar areas within Dinosaur National Monument was protested. It was decided that the public land values involved should continue to be protected so that Congress could make a decision considering the areas together as a whole.

Use of management priority areas and use of federal mineral concern areas in the proposed RMP, particularily with regard to fluid mineral leasing under non-federal surface, were protested as inconsistent with the FLPMA and in the latter instance beyond BLM's authority. To reduce possible confusion the revised proposed plan described management prescriptions, geographical locations, the acreage involved, and the management objectives of individual management units. Also, since the individual management units cover broader areas and their management prescriptions apply only to federal surface and/or federal minerals, there is no need to designate areas as federal mineral concern areas. They are dropped from this document.

The absence in the proposed plan of analysis of the suitability of segments of the Yampa River (contained in the national inventory list) for inclusion in the National Wild and Scenic River system was also protested. The protesting party suggested a supplement to the proposed RMP/FEIS or a new draft be issued. The BLM will, however, schedule the necessary study and analysis when funds are available. Funding has been requested in the 1990-91 budget documents.

A Revised Proposed RMP was prepared to clarify the management descriptions. No decisions were changed in the Revised Proposed RMP. The revised RMP received two protests. One protest was received from the Northwest Colorado Ranchers' Association and one protest was received from the Colorado River Water Conservation District. No new issues were raised by the protestors. These protests have also been resolved by the BLM Director.

The Little Snake RMP provides an optimum multiple-use mix by balancing conflicts and providing for a variety of uses. It provides the necessary constraints for protecting renewable resources from irreversible decline, while accommodating production of minerals, livestock grazing, off-road vehicles, recreation, and other uses.

MITIGATION

The resource management plan has been designed to avoid or minimize environmental harm where practicable. Specific mitigation measures are described in Chapter Two of the approved resource management plan.

MONITORING

A monitoring program has been developed for the plan which includes monitoring and evaluation standards for implementing the plan and determining whether mitigation measures are satisfactory. The monitoring program is described in Chapter Two of the approved resource management plan.

PUBLIC INVOLVEMENT

Public opinion was sought throughout the planning and decision-making process. Public participation in the process is summarized in Chapter Three of the approved resource management plan.

CONSISTENCY

This plan is consistent with the plans, programs, and policies of other federal agencies and state and local governments with the exception of one possible inconsistency identified in Chapter Three of the approved resource management plan.

PUBLIC AVAILABILITY OF THIS DOCUMENT

Additional copies of the approved Little Snake Resource Management Plan are available on request at the Little Snake Resource Area, BLM, 1280 Industrial Avenue, Craig, Colorado 81625, Phone (303) 824-4441. Copies may also be obtained from the Craig District Office, BLM, 455 Emerson Street, Craig, Colorado 81625, and the Colorado State Office, BLM, 2850 Youngfield Street, Lakewood, Colorado 80215.

April 26, 1989
Date

Tom Walker **Associate**
Colorado State Director
Bureau of Land Management

LITTLE SNAKE

RESOURCE MANAGEMENT PLAN

Moffat, Rio Blanco, and Routt Counties, Colorado

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CRAIG DISTRICT
LITTLE SNAKE RESOURCE AREA

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April 26, 1989
Date

TABLE OF CONTENTS

Chapter I—Introduction

Purpose and Need 1
Description of the Planning Area 1
Implementation 3
Monitoring and Evaluation 4
Modification 4
Maintenance 4
Relationship to other BLM Planning Levels and Studies 4

Chapter II—Resource Management Decisions

Introduction 5
Management Actions 6
  Coal 6
  Oil and Gas 6
  Other Minerals 10
  Livestock Grazing Management 10
  Wildlife Habitat 12
  Threatened/Endangered, Candidate, and Sensitive Plants 14
  Wild Horses 15
  Soil and Water Resources 16
  Forest Lands and Woodlands 19
  Fire Management 19
  Wilderness 22
  Natural History (Areas of Critical Environmental Concern) 24
  Recreation Management 25
  Vehicle Use Management 28
  Cultural and Paleontological Resource Management 28
  Public Lands Retention/Disposal/Acquisition 28
  Major Right-of-Way Management 29
  Access, Boundary Marking, and Road Requirements 36
Management Units 37
  Eastern Yampa River M.U. 1 37
  Northern Central M.U. 2 38
  Little Snake River M.U. 3 39
  Eastern Foothills M.U. 4 39

TABLE OF CONTENTS (continued)

Douglas Mountain M.U. 5 40
Northern Great Divide M.U. 6 40
Scattered Sands M.U. 7 41
Axial Basin M.U. 8 42
Cold Spring M.U. 9 42
Proposed Wilderness Areas M.U. 10 43
  Cross Mountain M.U. 10A 43
  Diamond Breaks M.U. 10B 43
Recreation Areas M.U. 11 44
  Little Yampa/Juniper Canyon M.U. 11A 44
  Cedar Mountain M.U. 11B 45
  Wild Mountain M.U. 11C 46
Vermillion M.U. 12 47
ACECs M.U. 13 47
  Limestone Ridge M.U. 13A 47
  Irish Canyon M.U. 13B 48
  Lookout Mountain M.U. 13C 49
  Cross Mountain Canyon M.U. 13D 49
Middle Mountain M.U. 14 50
Cross Mountain Foothills M.U. 15 51
West Red Wash M.U. 16 51
Willow Creek M.U. 17 52

Chapter III—Consultation, Coordination, Consistency, and Public Participation

Introduction 53
Public Participation 53
Consultation and Coordination 54
Consistency with Other Plans 54

TABLES

Table 1 - Summary of Coal Unsuitability Results 7
Table 2 - Acres Available for Further Consideration for Coal Leasing 8
Table 3 - Oil and Gas Leasing Restriction Recommendations 9
Table 4 - Dates Allowed for Resource Development in Areas of Wildlife Concerns 12
Table 5 - Potential Fragile Soil Areas Within the Little Snake Resource Area 18
Table 6 - Wilderness Suitability Acreages 22
Table 7 - Areas Needing Public Access 26
Table 8 - Vehicle Use Restrictions 27
Table 9 - Areas Unsuitable for Siting Major Rights-of-Way 29
Table 10 - Existing and Potential Rights-of-Way Corridors 34
Table 11 - Areas Sensitive for Siting Major Rights-of-Way 35
Table 12 - Management Units 37

MAPS

Map 1 - Location Map 2
Map 2 - Access and Boundary Posting Needs 20-21
Map 3 - Retention and Disposal Areas 30-31
Map 4 - Major Rights-of-Way 32-33

APPENDICES

Appendix 1 - Federal Coal Planning Area A1-1
Appendix 2 - Methodology Used in Identifying Areas Acceptable for Further Coal Leasing Consideration A2-1
Exhibit A - Written Finding on Criterion 3 ..... A2-29
Exhibit B - Consultation Letters A2-33
Appendix 3 - Parcels of Land That Meet Disposal Criteria A3-1

CHAPTER I

CHAPTER I

INTRODUCTION

This approved resource management plan (RMP) sets forth the land-use decisions, terms, and conditions for guiding future management actions in the Little Snake Resource Area. All uses and activities in the resource area must conform with decisions, terms, and conditions as described herein. This plan was prepared in accordance with the requirements of the Federal Land Policy and Management Act (FLPMA) of 1976 and the National Environmental Policy Act (NEPA) of 1969.

The plan describes how the resource area will be managed and includes mitigation to avoid or minimize environmental harm. The plan also identifies resource-specific plans which may become necessary to meet the management objectives.

This document does not present information on the existing environment or environmental consequences of the decisions. That information was previously discussed in the environmental impact statement (EIS) which may be reviewed at the Little Snake Resource Area Office. The draft EIS was issued in February 1986 and the final EIS was issued September 1986.

PURPOSE AND NEED

In the late 1960s and early 1970s, the Bureau of Land Management (BLM) conducted three planning efforts on small sub-units of the Little Snake Resource Area. These planning efforts resulted in three management framework plans (MFPs) that provided management direction for resources and resource uses. The Little Snake MFPs, which are being replaced by this approved RMP, are the Williams Fork MFP, the Maybell/Great Divide MFP, and the Vermillion MFP. Because of changing circumstances and conditions, including new legislation, changing policies, and new land use conflicts and issues, a resource management plan was needed. The Little Snake resource management planning effort covering the entire resource area was initiated in 1983.

In addition to meeting the requirements in the Federal Land Policy and Management Act of 1976 for land-use planning (43 CFR, Part 1600), this plan satisfies BLM's policy to identify (1) public land suitable for wilderness designation (the study phase of BLM's wilderness review process); (2) land with potential for coal leasing (43 CFR, Part 3400); (3) public land as open, closed, or limited for vehicle use (Executive Order 11989); and (4) public land available for disposal and exchange.

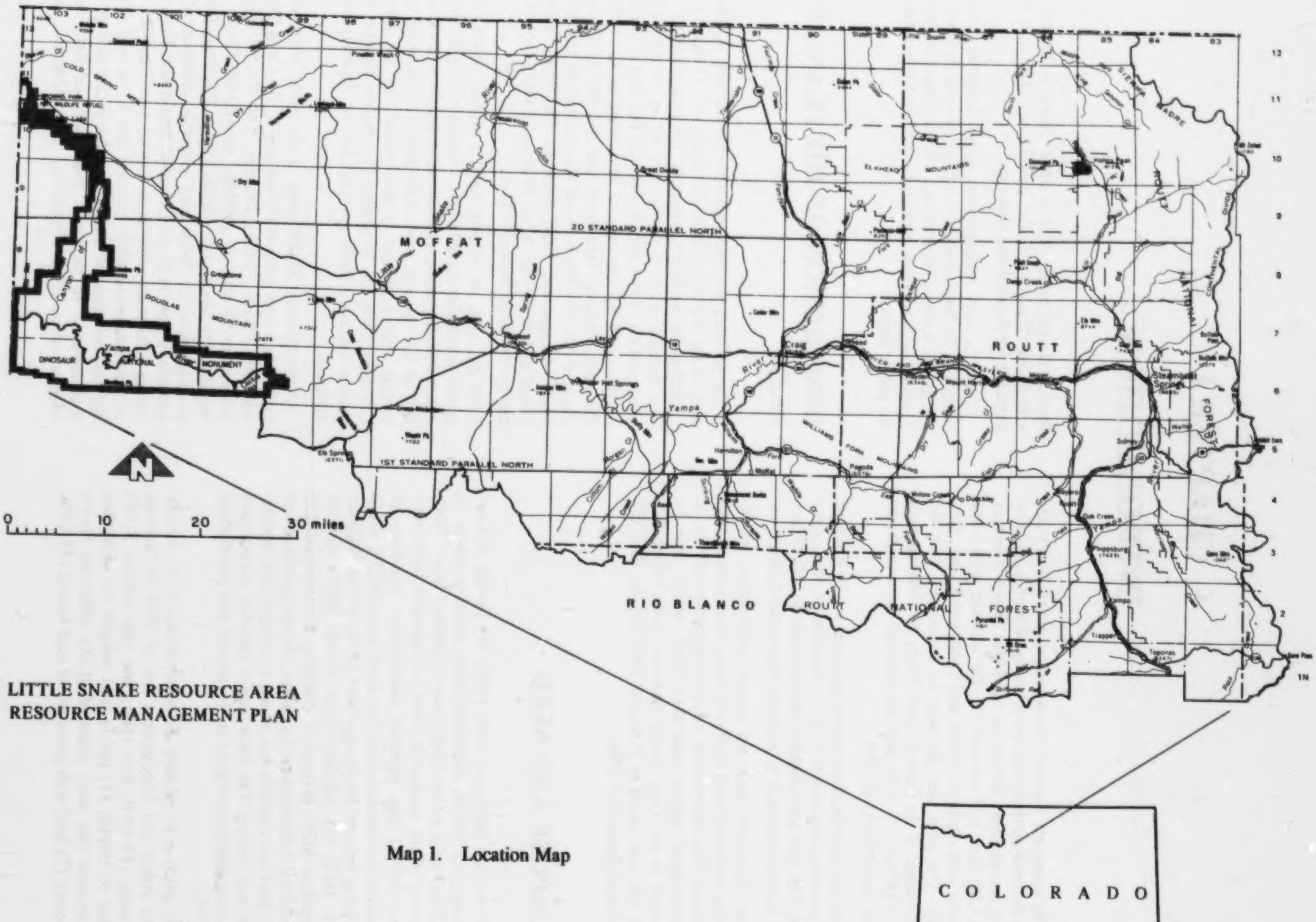
Conflicts and management issues centered around protecting the land's resources while providing for coal, oil, and gas production; livestock and wildlife forage; wilderness, floatboating, and other recreation uses; and other uses of the public lands.

DESCRIPTION OF THE PLANNING AREA

The planning area encompasses approximately 3,258,000 acres in the Bureau of Land Management's Craig District, located in the northwest corner of Colorado (Map 1). The area includes most of Moffat and Routt counties and a small portion of Rio Blanco County. The area is bordered on the north by the state of Wyoming; on the west by Dinosaur National Monument and the state of Utah; on the south by the White River Resource Area (Bureau of Land Management, Craig District), the Routt National Forest and the White River National Forest; and on the east by the Routt National Forest.

Of the total, 40 percent (or 1.3 million acres) of the surface ownership is public land administered by the Bureau of Land Management, concentrated primarily in the western half of the resource area. Fifty-three percent is privately owned, and 7 percent is administered by the state of Colorado. However, 56 percent (1.1 million acres) of these private and state lands are underlain by federally-owned minerals.

Approximately 34,000 acres of the public lands within the resource area are jointly managed by the Craig District and the Vernal (Utah) District. The Vernal District administers livestock grazing, watershed, forest and woodland products, and wildlife habitat. The Craig District is responsible for lands and minerals management. In addition, a portion of the Diamond Breaks and West Cold Spring wilderness study areas extend into Utah. Because of this interrelationship between the Craig and Vernal districts, coordination during the plan preparation process was essential. In particular, procedures set forth in the Memorandum of Understanding for Wilderness Study


MOFFAT
ROUTT
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ROUTT NATIONAL FOREST
DINOSAUR NATIONAL MONUMENT
DOUGLAS MOUNTAIN
COLD SPRING MTN
ELKHEAD MOUNTAINS
SIERRA MADRE
CONTINENTAL DIVIDE
WILLIAMS FORK MOUNTAINS
2D STANDARD PARALLEL NORTH
1ST STANDARD PARALLEL NORTH
Yampa
Craig
Steamboat Springs
Hayden
Oak Creek
Yampa
Toponas
Elk Springs
Hamilton
Browns Park National Wildlife Refuge
N
0
10
20
30 miles
COLORADO

LITTLE SNAKE RESOURCE AREA
RESOURCE MANAGEMENT PLAN

Map 1. Location Map

(December 1982) between the Craig and Vernal district managers were followed.

IMPLEMENTATION

Conformance requirements

All future resource management authorizations and actions, including budget proposals, will conform with (or at a minimum not conflict with) the plan. All operations and activities under existing permits, contracts, cooperative agreements, or other instruments for occupancy and use will be modified if necessary to conform with this plan within a reasonable period of time, subject to valid existing rights.

Implementation of management decisions will be guided by a series of activity plans. An activity plan is done only when necessary to implement the more general RMP decisions. It is a more detailed and specific plan for managing resources and actions. Detailed schedules and management actions will be described in each activity plan. Resource specific plans to be prepared include habitat management plans for wildlife, allotment management plans for livestock grazing, watershed activity plans, and cultural resource management plans. Site specific management plans will also be required for areas of critical environmental concern (ACECs), special recreation management areas (SRMAs), and areas ultimately designated by Congress as units of the National Wilderness Preservation System. In addition, an overall resource monitoring plan will be prepared for the Little Snake Resource Area to identify appropriate locations and methods for monitoring resources. It will also identify coordination procedures for developing and initiating specific monitoring studies and methods for recording and evaluating data.

In addition to this plan, a wilderness study report is being prepared which will identify the preliminary recommendations for each wilderness study area. The report, along with a final environmental impact statement on the wilderness portion of this plan, will be submitted to Congress for action.

Activities or uses not specifically addressed in this plan, such as small-scale projects (rights-of-way applications for rural telephone lines, access roads, free use permits, etc.), will be authorized if they meet legal requirements and are compatible with the objectives of each management unit.

Valid existing rights

This plan does not repeal valid existing rights on public lands. Valid existing rights are those claims or rights to public land that take precedence over the actions in the plan. As an example, a mining claim issued prior to the preparation of this plan in an area withdrawn from mineral entry may be valid. Valid existing rights may be held by other federal agencies or by private individuals or companies. Valid existing rights may also pertain to oil and gas leases, rights-of-way, and water rights.

The management units depicted on the Resource Management Plan Map include areas of split estate (nonfederal surface ownership over federal subsurface mineral estate), private, state, or other nonfederal lands. However, the management unit prescriptions apply only to public lands (the term "public lands" means any land and interest in land owned by the United States within the several states and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership ... FLPMA). On split estate lands, management unit prescriptions indicate how BLM will manage the federal mineral estate; they do not dictate surface uses unrelated to federal mineral development. None of the management unit prescriptions apply to private, state, or other lands or minerals not managed by BLM.

In addition, this plan does not propose that Congress reserve water rights for Cross Mountain, Diamond Breaks, or any other wilderness study area. While it has been argued that wilderness designation implies water rights, if Congress expressly states that water rights are not reserved for a wilderness area, there can be no implication and no reserved water right. The Wilderness Act and BLM Wilderness Management Policy recognize valid existing rights. In the case of water rights, if any reserved water rights are determined to be established by designation, the priority date of that right would be junior to all rights existing at the time of designation. It would, therefore, not preempt any existing water rights.

Further planning or environmental analysis

Decisions in this plan will be implemented over a period of years. In some cases, more detailed and site-specific planning and environmental analysis may be required before an action can be taken. The environmental impact statement prepared with this plan will be used as a base and will be referenced in any additional site- or program-specific environmental analysis. Requirements for additional planning and analysis are incorporated in the decisions found in Chapter II.

Implementation priorities

Priorities have been established for those decisions which cannot be implemented immediately. These priorities are intended to guide the order of implementation. Priorities will be reviewed annually to help develop the budget for the coming year. The priorities may be revised based upon new administrative policies, new Department directions, or new Bureau goals. These priorities are shown in Chapter II.

Appeal rights

Any person adversely affected by a specific action in this plan may appeal (see 43 CFR 4.400) at the time the action is proposed for implementation.

MONITORING AND EVALUATION

This plan will be monitored to ensure (1) projects are tied to the budget, (2) projects are implemented on the ground, (3) stipulations or restrictions are adhered to, and (4) support, work months, and procurement needed to implement the projects are considered.

This plan will also be monitored to determine effectiveness and the need for revision or amendment. Monitoring will determine whether objectives are being achieved, whether assumptions were correctly applied and impacts correctly predicted, whether mitigation measures are satisfactory, and whether changes need to be made.

MODIFICATION

This plan may be changed through amendment. Monitoring and evaluation findings, new data, and new or revised policies will be evaluated to determine whether an amendment is needed. Any change in circumstances or conditions that affect the scope, terms, or conditions of the plan may warrant an amendment. In all cases, a proposed action that does not conform with the plan and warrants further consideration before a plan revision is scheduled will require an amendment. The amendment process is identical to the resource management planning process, but the scope of information, analysis, and documentation is more limited. Generally, an amendment is site specific or involves only one or two planning issues.

This plan may be revised when it becomes outdated or obsolete. A plan revision requires a new resource management plan for the entire resource area.

The public and other agencies will be included in the amendment and revision process.

MAINTENANCE

This plan will be updated as necessary to keep it current without changing its scope or intent. These changes will not affect decisions, conditions, terms, or levels of resource use or restrictions from those prescribed in the plan.

RELATIONSHIP TO OTHER BLM PLANNING LEVELS AND STUDIES

Development of an RMP occurs within the framework of the BLM planning system. The planning system is subdivided into three distinct tiers. The Council on Environmental Quality (CEQ) regulations provide for tiering to aid compliance with NEPA (40 CFR 1500-1508). The three general tiers in the BLM planning system include policy planning, land-use planning, and activity- or program-specific planning. This plan satisfies the requirements for the land-use tier of planning.

Other documents are being prepared as a result of this land-use planning effort. They include a rangeland program summary and a wilderness study report.

The rangeland program summary is a communications tool used to (1) announce the results of the livestock grazing portion of the land-use plan/environmental analysis; (2) inform the public of the Bureau's rangeland resource management objectives for the allotment or planning area; and (3) document publicly the actions intended to achieve those objectives. The rangeland program summary will be published within five months from publication of this record of decision for the approved plan.

Seven wilderness study areas (WSAs) are being studied to determine whether they are suitable or not suitable for inclusion into the National Wilderness Preservation System. They are the West Cold Spring, Diamond Breaks, Cross Mountain, Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears WSAs. The information generated in this wilderness plan will contribute to the development of the legislative environmental impact statement (EIS) and the wilderness study report (WSR). The WSR will contain the preliminary recommendation for each WSA and document the considerations that led to the recommendations. The WSA and EIS will be transmitted by the President to the Congress for appropriate action.

CHAPTER II

CHAPTER II

RESOURCE MANAGEMENT DECISIONS

INTRODUCTION

This chapter describes the decisions that will guide future management of the publicly-owned resources in the Little Snake Resource Area. These decisions constitute the "resource management plan" for this resource area.

This revised plan consists of two parts. The first part describes management actions for individual resources throughout the resource area. The second part consists of management unit decisions. These management units are geographic areas that are suited for development, management, protection, or use of a particular combination of management objectives. The management units, described in detail later in this plan, have been given names to represent their general geographical location. Each management unit contains a description of how resource uses will be managed and what terms and conditions are necessary to meet the management objectives for each unit. Management units are delineated on the enclosed Resource Management Plan Map. Resource uses must be consistent with the unit's management objectives. In addition, all public lands will be managed according to the following "Management Actions" section.

Future proposals will be evaluated in the context of a unit's management objectives, as well as the Management Actions section of this plan.

Although there is some overlap between these two sections, neither is designed to stand on its own as a distinct and complete description of the resource management decisions. These sections are interrelated and interdependent and they must be viewed together to get a complete, accurate picture of the proposed management direction for the Little Snake Resource Area.

Priorities for implementing decisions in the RMP will be based on what is needed to protect or improve resources, public demands, administrative duties and policies, and Department of the Interior and BLM goals and directions. Priorities will be reviewed annually to help develop the budget commitments for the coming year. The priorities may be revised based upon new administrative policies, new departmental directions, or new Bureau goals.

The following major decisions need to be implemented during the first five years following approval of this plan. The order in which these are listed does not indicate an order of implementation.

- An oil and gas RMP amendment (referred to as an activity plan in the Final Little Snake RMP/EIS) will be developed to further refine the degree to which oil and gas development will be allowed.
- A rangeland program summary will be published within 5 months of approval of this plan.
- Monitoring will be initiated on M and I category allotments, including 13 conflict allotments. Monitoring on other allotments will be prioritized according to those exhibiting worst forage conditions.
- Livestock use decisions will be issued, or agreements will be entered into, within 5 years of publication of a rangeland program summary.
- Grazing will be suspended where key forage plants have been critically overutilized.
- Management plans will be written and implemented for Limestone Ridge ACEC/RNA, Cross Mountain ACEC, Irish Canyon ACEC, and Lookout Mountain ACEC.
- Water quality and watershed activity plans will be developed in areas with potential for water quality improvement projects.
- A wilderness study report and a final wilderness environmental impact statement for seven WSAs will be prepared for submission to Congress.
- A recreation area management plan will be prepared for the Little Yampa/Juniper Canyon Special Recreation Management Area.
- An amendment to the Little Snake RMP will be scheduled as soon as funding permits, to provide a suitability recommendation on designation of the Yampa River segments for inclusion in the WSR System.
- A vehicle use implementation plan will be completed within one year following approval of this plan.
- Cultural and paleontological resource management plans will be developed to address the identification, protection, and monitoring of these resources within the Little Snake Resource Area. A cultural and

paleontological resource management plan will be developed for the Sand Wash Basin within the next five years.

MANAGEMENT ACTIONS

This section describes the management direction for each of the major programs in the resource area. While the direction varies from activity to activity, overall objectives, planned actions, resource conditions and rationale, implementation priorities, monitoring, and support needs are listed for each activity.

Coal

Objectives

- Maximize the availability of the federal coal estate for exploration and development.
- Facilitate orderly, economic, and environmentally-sound exploration and development of the coal resource within the principles of balanced multiple-use management.

Planned Actions

1. Approximately 638,800 acres (containing an estimated 5.8 billion tons of coal) are acceptable for further consideration for federal coal leasing. Of this total, approximately 457,089 acres (an estimated 4.2 billion tons of coal) are acceptable for further consideration for leasing for surface or underground development. Approximately 181,669 acres (an estimated 1.3 billion tons of coal) are acceptable for further consideration for leasing for underground development only (see Tables 1 and 2). Approximately 266 million tons of coal throughout the region are not available for surface mining.
2. Site-specific activity planning, including additional environmental analysis, is needed before a decision to lease specific tracts can be made.
3. Exploratory drilling will be allowed in order to obtain sufficient data for resource management decisions and fair market value determinations.
4. Other data gathering efforts will be scheduled when needed to ensure data adequacy standards will be met for activity planning within the coal planning area.

Resource Condition and Rationale

The application of the coal unsuitability criteria (43 CFR 3461) and the land-use planning process (which compared other resource values to lands with coal development potential) have identified lands where coal can be considered for future development. Lands available for further consideration will be assessed during development of coal activity plans or in response to requests for coal leasing. (See Appendix 2.) These lands are large enough to consider alternative locations for specific leasing proposals when demand arises.

Implementation Priorities

Lands found acceptable in this RMP are available for further consideration for leasing and/or exchange. However, all lands determined to be suitable, unsuitable, or unacceptable for further consideration for leasing and/or exchange may be reviewed and suitability determinations modified based on new data during activity planning efforts.

Priority will be given to emergency coal lease applications needed to continue operations of existing coal mines and to public demand for leasing exploration.

Monitoring

Inactive coal leases will be inspected once annually to assure their inactive status. Mining operations of active federal coal leases will be inspected quarterly by BLM. Mining operations are also inspected regularly by the Office of Surface Mining, Colorado Mined Land Reclamation Division, and the Mining Safety and Health Administration.

Support

Other resource specialists will be used to assess impacts of proposed leases and to identify mitigaton, if needed. Cadastral survey will locate public land boundaries.

Oil and Gas

Objectives

- Maximize the availability of the federal oil and gas estate for exploration and development.
- Facilitate orderly, economic, and environmentally-sound exploration and development of oil and gas resources using balanced multiple-use management.

TABLE 1

SUMMARY OF COAL UNSUITABILTY RESULTS *

Criterion	Acres		
	Before Exceptions	After Exceptions	After [1] Exemptions
1 Federal Lands Systems	322	322	322
2 Rights-of-Way and Easements	3,041	0	0
3 Buffer Zones along Rights-of-Way and adjacent to Communities and Buildings	3,151	1,486	1,486
4 Wilderness Study Areas	0	0	0
5 Scenic Areas	0	0	0
6 Lands used for Scientific Studies	0	0	0
7 Historic Lands and Sites	0	0	0
8 Natural Areas	0	0	0
9 Federally Listed Endangered Species	7,541	7,541	7,541
10 State-Listed Endangered Species	0	0	0
11 Bald and Golden Eagle Nests	48,207	45,898	45,898
12 Bald and Golden Eagle Roost and Concentration Areas	7,541 [2]	7,541 [2]	7,541 [2]
13 Falcon Cliff Nesting Site	2,402	2,402	2,402
14 Migratory Birds	2,681	2,681	2,681
15 State Resident Fish and Wildlife	611,878 [3]	37,960	37,960
16 Floodplains	5,104	5,104	5,104
17 Municipal Watersheds	0	0	0
18 National Resource Waters	0	0	0
19 Alluvial Valley Floors	1,948 [4]	1,948 [4]	1,948 [4]
20 State Proposed Criterion	0	0	0
Total Lands Unsuitable (excluding overlaps)	611,878	104,261	104,261

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* This table is a summary of application of the 20 coal unsuitability criteria from 43 CFR 3461 to the federal coal planning area. See Appendix 2, for more detailed information.

[1] The unsuitability criteria are subject to exemptions and/or specific exceptions. General exemptions applicable to several criteria include: lands subject to valid existing rights (Criteria Numbers 1, 3, 4 [limited]); lands to which the operator has made substantial legal and financial commitments prior to January 4, 1977 (all except Criteria Numbers 3, 4, and 19); surface coal mining operations existing on August 3, 1977 (all except criteria Numbers 4 and 7); and lands for which a mining permit has been issued (all but 3, 4, and 7). All criteria except 4, 5, 6, 15, 16, and 19 are also subject to one or more specific exceptions. For example, the exceptions to Criterion Number 11 state that a lease may be issued if stipulations can ensure that eagles are not disturbed during the breeding season, or if the Fish and Wildlife Service determined that the nest(s) of golden eagles can be moved; and the size of a buffer zone can be decreased if active eagle nests will not be adversely affected. Results did not change after the exemptions were considered because the criteria were not applied to leased lands (43 CFR 3461.4-2), and none of the exemptions were applicable to the unleased lands in the coal planning area.

[2] These lands are the same as identified in Criterion 9.

[3] Overlaps with all other criteria.

[4] Includes 1,081 acre overlap with Criterion 16.

TABLE 2

ACRES AVAILABLE FOR FURTHER CONSIDERATION FOR COAL LEASING (excluding overlaps)*

Screens	Results
Coal Development Potential	638,758
Unsuitabilty Review	(-104,261)
Acreage Remaining	534,497
Surface Owner Consultation	(-68,808)
Acreage Remaining	465,689
Multiple Use Tradeoffs	
Recreation	(- 8,600)
Acreage Remaining	457,089
Total Acres Available Surface/Underground Methods	457,089
Total Acres Available Underground Methods Only (No Surface Disturbance)	181,669
Total Coal Tonnage Available	5.5 billion

* In some portions of the coal planning area, more than one screen was found to apply, e.g., portions of the Little Yampa Canyon SRMA were eliminated as the result of both unsuitability criteria and multiple use tradeoffs. Acreage for such areas was only subtracted once from the total coal planning area acreage.

Planned Actions

1. The resource area is available for oil and gas leasing. Areas have been designated for leasing with standard stipulations, seasonal restrictions, avoidance stipulations, performance objectives, or no-surface-occupancy stipulations; areas where no new leasing is allowed have also been identified (see Table 3). Stipulations or restrictions may be waived or reduced if resource conditions change and the protection is no longer necessary or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts. The appropriateness of waivng specific stipulations will be further analyzed in the oil and gas RMP amendment discussed in Item 2 below.

   When considering leasing and development of federal minerals where the surface is privately owned, efforts will be made to identify environmental concerns and work with the private surface owners regarding potential impacts to their surface. Private surface owners are encouraged to become involved in the activity planning process. Whenever possible, BLM's actions will be consistent with the wishes of the surface owner; however, impacts to federal lands or resources, threatened or endangered species, or other resource values protected by nondiscretionary statute will be mitigated to an acceptable level.

2. An oil and gas RMP amendment (referred to as an activity plan in the Final Little Snake RMP/EIS) will be developed to further refine the degree to which oil and gas development will be allowed. This RMP amendment will assess direct, indirect, and cumulative impacts resulting from a reasonable, foreseeable level of oil and gas development. The plan amendment will identify mitigation to reduce or eliminate unacceptable adverse environmental impacts.

   Until the plan amendment is approved, the existing Little Snake Oil and Gas Umbrella Environmental Assessment as modified by the Little Snake RMP oil and gas leasing decisions will be the National Environmental Policy Act compliance document for oil and gas leasing in the resource area.

Resource Condition and Rationale

This action maximizes the lands available for oil and gas development and ensures orderly, environmentally sound exploration and development.

Implementation Priorities

The oil and gas RMP amendment was initiated in March 1989 and is scheduled for completion in 1990.

Monitoring

Oil and gas exploration and development will be monitored according to Washington, Colorado State, and Craig District inspection and enforcement strategies.

Support

Other resource specialists will be needed in the development of the oil and gas plan amendment and will review applications for permit to drill. Cadastral survey may be needed to locate public land boundaries.

TABLE 3

OIL AND GAS LEASING RESTRICTION RECOMMENDATIONS

Proposed Restrictions	Estimated Acreage	Percentage of Federal Oil and Gas Acreage (1,878,400 acres)	Area [1]
Seasonal Restrictions	685,927	36	Critical wildlife habitat (scattered throughout the resource area) [2]
Avoidance Stipulations [3]	11,680		Irish Canyon ACEC
	6,500		Lookout Mountain ACEC
Subtotal	18,180	1	
Performance Standards [4]	35,840	2	Vermillion M. U., including portions of Canyon Creek, Shell Creek, Vermillion Creek, Sand Wash, Dry Creek, Yellow Cat Wash, northwest facing slopes Vermillion Bluffs (extremely fragile soils/water areas)
No Surface Occupancy	16,240		Critical wildlife habitat (scattered throughout the resource area) [5]
	1,350		Limestone Ridge ACEC/RNA
	14,081		Cross Mountain WSA, including Cross Mountain canyon ACEC (recommended for wilderness designation)
	19,840		Little Yampa/Juniper Canyon SRMA
	880		Cedar Mountain recreation area
	384		Steamboat Lake State Park
Subtotal	52,775	3	
No New Leasing	36,240	2	Diamond Breaks WSA (recommended for wilderness designation)
Standard Lease Terms	1,049,438	56	Remaining federal oil and gas acreage

[1] ACEC Area of Critical Environmental Concern
RNA Research Natural Area
SRMA Special Recreation Management Area
WSA Wilderness Study Area

[2] See Table 4 under Wildlife Habitat for a summary of seasonal wildlife restrictions. Seasonal restrictions do not apply to maintenance and operation of producing wells. Exceptions to seasonal limitations in any particular year may be specifically approved in writing by the authorized officer. These acreages are estimates based on the application of these stipulations in the June 1982 Little Snake Oil and Gas Umbrella Environmental Assessment.

[3] See the descriptions under Management Actions Section for examples of avoidance stipulations. Additional scattered areas containing habitats of known Colorado BLM sensitive plants and specifically identified remnant plant associations would also be protected by avoidance stipulations.

[4] If performance standards could not be met, then no-surface-occupancy would be allowed. Additional areas within the resource area may have restrictive stipulations imposed on a case by case basis to protect fragile soils and water resource values; see Soils and Water Resources for further discussion.

[5] Critical raptor habitat, greater sandhill crane habitat, critical wildlife watering areas, beaver colonies, sage grouse strutting grounds, sharptailed grouse dancing grounds, prairie dog towns (potential black footed ferret habitat). These acreages are estimates based on the application of these stipulations in the June 1982 Little Snake Oil and Gas Umbrella Environmental Assessment.

Other Minerals

Objectives

- Maximize the availability of the federal mineral estate for mineral exploration and development.
- Facilitate orderly, economic, and environmentally sound exploration and development of mineral resources within the principles of balanced multiple-use management.

Planned Actions

1. All public land is open to mineral entry and development under the General Mining Law of 1872 unless administratively withdrawn or proposed for withdrawal (proposed wilderness designation). Locatable mineral exploration and development on public land would be regulated under 43 CFR 3800.
2. Applications for removing common variety mineral materials, including sand and gravel, will continue to be processed as they are received. Interdisciplinary review of each proposal will determine stipulations to protect important surface values. Mineral material sales will not be allowed in Cross Mountain Canyon ACEC, Limestone Ridge ACEC/RNA, Little Yampa/Juniper Canyon SRMA, and the Cedar Mountain recreation management unit.
3. BLM will consider leasing geothermal energy resources or other leasable minerals as each application is received. Minerals that are leasable only on lands acquired under the Bankhead Jones Act will be treated as other leasable minerals. In Cross Mountain Canyon ACEC, Limestone Ridge ACEC/RNA, Little Yampa/Juniper Canyon SRMA, and the Cedar Mountain recreation management unit, leasing of other minerals for underground mining will be allowed with no-surface-occupancy stipulations. Leasing for surface mining will not be allowed in these four areas.
4. New leases and mineral material sales within fragile soil and water areas such as the Vermillion Management Unit will be subject to the performance objectives described under Soil and Water Resources.
5. The recommended Diamond Breaks and Cross Mountain wilderness areas (including Cross Mountain Canyon ACEC) would be withdrawn from locatable mineral entry, leasing and development of other minerals, and mineral material sales if designated as wilderness by Congress.

Resource Condition and Rationale

This action maximizes the lands available for mineral development and ensures orderly, environmentally-sound exploration and development of the other mineral resources.

Implementation Priorities

Proposals for other mineral resources will be reviewed on an individual basis.

Monitoring

Operations under the General Mining Law of 1872 (as amended) will be inspected periodically to ensure compliance with specific notices, plans of operations, laws, and regulations.

Mineral materials and other leasable minerals actions will be monitored, according to the terms and conditions of the specific permit or lease.

Support

Other resource specialists will assess impacts of proposed projects and will identify mitigative measures. Cadastral survey will locate public land boundaries.

Livestock Grazing Management

Objectives

The Bureau's objective is to improve range conditions in terms of species diversity and abundance, as well as increasing carrying capacities for both livestock and wildlife. Estimates of stocking rates contained in this plan do not necessarily reflect the need nor the intent to commensurately reduce livestock stocking levels. Monitoring studies will be conducted to more accurately determine carrying capacities and the condition and trend of plant communities in relation to the above stated objective. Decisions to increase or decrease livestock and/or wildlife numbers can only be made after this information has been determined and management techniques are developed so that livestock and wildlife utilization can be managed. If adjustments are determined to be necessary, every effort will be made to accomplish them through consultation with individual ranchers, the Colorado Division of Wildlife, and other interests, as appropriate. Consultation and coordination will also be sought during monitoring and other phases of the studies.

Planned Actions

1. Livestock grazing utilizing federal preference (166,895 AUMs) will be allowed until rangeland monitoring studies are completed.
2. BLM will immediately begin rangeland monitoring studies on M and I category allotments, including 13 conflict allotments (allotment numbers 4203, 4206, 4207, 4209, 4210, 4219, 4225, 4302, 4431, 4332, 4520, 4521, and 4522), to yield information needed to make decisions on livestock stocking rates. Priorities for rangeland monitoring studies will be determined by the worst forage conditions established from the 1981-1983 surveys. The level of monitoring will depend on funding and staff.
3. Surveys done during 1981-1983 for 73 percent of the area and earlier surveys for the rest of the area, which estimated forage available to support a grazing level of 148,821 AUMs, will be used as baseline inventory data.
4. Livestock use adjustments will be implemented in accordance with 43 CFR 4110.3-3 after acquiring a minimum of 2 years of rangeland monitoring data, in combination with baseline data. Decisions implementing changes in livestock use will be issued as soon as data are available to support that change. In no case will more than 5 years of rangeland monitoring data be required for adjustments. Any adjustments would result in consultation/coordination with the livestock operator.
5. BLM policy is to issue decisions or enter into agreements within 5 years of publication of a rangeland program summary (RPS) following completion of a Grazing Environmental Impact Statement Resource Management Plan (EIS/RMP). An RPS is issued within 5 months after the RMP is signed. A five year implementation period will be used. Decisions will be issued in the third and fifth years to modify the adjustments as necessary to reach estimated grazing capacity. These decisions will be contained in the RPS updates. Mutual agreements may be entered into at any time during the five year period. These will also be documented in the RPS updates.
6. Grazing will be temporarily suspended in areas where key forage plants have been critically overutilized.
7. Vegetation land treatments will be implemented on 68 allotments. Treatments will involve interseeding, burning and reseeding, spraying, and plowing and reseeding. In conducting these treatments, BLM will adhere to established procedures and design specifications to protect all resource uses and values. A benefit/cost analysis and environmental analysis will be completed before any treatments are implemented.
8. Range improvement projects will be constructed on 69 allotments to control livestock use, improve distribution, and improve riparian/wetland habitat. A benefit/cost analysis and environmental analysis will be completed before any projects are implemented.
9. Management categorization (M, I, or C) for allotments will be updated as the result of rangeland condition change or as data that support changes becomes available through the monitoring program. (See rangeland program summary.)
10. Allotment management plans will be developed for all allotments within the Little Snake Resource Area. Level of detail of each plan will be determined from the management category (M, I, or C) for that allotment.

Resource Condition and Rationale

The goal of the livestock management program is to improve the rangeland forage resource by managing toward a desired plant community. This goal may be reached through proper livestock management, proper utilization of key forage plants, and selected range improvement practices. Domestic livestock is one of the most effective, controllable means of managing rangelands for a variety of uses. Concentrating monitoring efforts on conflict allotments and those where forage condition is in need of improvement will result in the most efficient use of range betterment funds. Allotment management plans will implement more intensive management systems which will result in managing towards a more desirable plant community.

Implementation Priorities

The following management actions must be implemented during the first five years following approval of this plan. These actions are not listed according to an order of implementation.

- Publish a rangeland program summary within 5 months of approval of this plan.
- Initiate monitoring on M and I category allotments, including 13 conflict allotments.
- Prioritize monitoring on allotments according to those exhibiting worst forage conditions.
- Suspend grazing where key forage plants have been critically overutilized.
- Issue livestock use decisions or enter into agreements within 5 years of publication of a rangeland program summary.

Monitoring

Rangeland monitoring studies will be initiated immediately on all allotments to yield information needed to make decisions on livestock stocking rates. These studies will be prioritized according to critical resource conflicts and existing resource damage. The level of monitoring on the lower priority allotments will depend on funding and staffing.

Support

Surface reclamation, hydrologic, soils, and archaeology support will be required in the planning of range projects. The support of Zone engineers will be needed to conduct feasibility studies, contract out project work, or complete the projects using Zone equipment and personnel. Other resource specialists will assess impacts of proposed projects and identify mitigation, if needed. Fire management support will be used for managing natural fire and prescribed burns. Cadastral survey will locate any needed public land boundaries.

Wildlife Habitat

Objectives

- Improve those rangelands that are key wildlife habitats and have the potential for increased forage production for wildlife grazing by improving soil and water resources. Maintain those rangelands that are at their desired plant communities.
- Determine stocking rates for wildlife and livestock that result in proper use of the public rangelands within the 13 conflict allotments. Issue decisions or enter into agreements to establish forage use and grazing capacity. The BLM will consult with the Colorado Division of Wildlife, affected grazing permittees, and other interested parties.

Planned Actions

1. Forage will be provided on BLM land to maintain approximately 66,400 mule deer, 6,500 elk, 6,300 pronghorn, and 70 bighorn sheep. This will contribute to total resource area big game populations of 110,660 mule deer, 21,700 elk, 8,350 pronghorn, and 70 bighorn sheep until further monitoring studies are completed and proper stocking rates are established.
2. BLM will immediately begin monitoring studies on M and I category allotments, including 13 conflict allotments (allotment numbers 4203, 4206, 4207, 4209, 4210, 4219, 4225, 4302, 4431, 4432, 4520, 4521, and 4522), to yield information needed to make decisions on wildlife numbers. Priorities for monitoring studies will be determined by the worst forage conditions, as established from the 1981-1983 surveys. The level of monitoring will depend on funding and personnel.
3. Wildlife-use adjustments will be implemented through consultation and coordination with the Colorado Division of Wildlife (CDOW) if monitoring data indicate that adjustments are necessary. Negotiation to implement changes in wildlife use will proceed as soon as data are available to support that change.
4. Wildlife habitat will be maintained or improved through mitigation or restrictions applied to all wildlife habitat-disturbing activities.
5. Wildlife habitat will be maintained or improved by using seasonal restrictions on activities to maintain wildlife production areas and important wildlife habitat (see Table 4).

TABLE 4

DATES ALLOWED FOR RESOURCE DEVELOPMENT IN AREAS OF WILDLIFE CONCERNS

Type of Wildlife Concern	Dates Activity Allowed
Greater sandhill crane nesting and staging area buffer zones	Oct. 15 - Feb. 28
Sage grouse strutting ground buffer zone	June 1 - Feb. 28
Critical raptor nest buffer zones	Aug. 1 - Jan. 31
Bald eagle habitat	April 15 - Oct. 31
Sharptail grouse dance ground buffer zone	June 15 - March 15
Mule deer and elk migration routes	May 15 - Oct. 15 and Dec. 1 - March 15
Mule deer, bighorn sheep, pronghorn antelope, mountain lion, elk critical winter range	April 15 - Nov. 30
Elk calving	July 1 - April 15
Pronghorn antelope fawning, bighorn sheep lambing	July 1 - April 30

6. Wildlife habitat for raptors and the greater sandhill crane, as well as wildlife watering areas, beaver colonies, sage-grouse strutting grounds, and potential black footed ferret habitat (some prairie dog towns), will have no-surface-occupancy stipulations applied to new oil and gas leases. These areas vary in size between 10 and 110 acres and are scattered throughout the resource area. Such stipulations will also be applied to similar habitat identified on future surveys.
7. Activity will not be permitted in threatened, endangered, and sensitive species' habitat that would jeopardize their continued existence. The CDOW and the U. S. Fish and Wildlife Service (USFWS) will be consulted according to Section 7 of the Endangered Species Act before implementing projects that might affect threatened and endangered species' habitat.
8. BLM will cooperate with the CDOW in monitoring the habitat and populations of bighorn sheep on Cross Mountain and in the Cold Spring Mountain area.
9. BLM will coordinate with the CDOW for joint funding of wildlife projects.
10. The federally-endangered American peregrine falcon, Colorado squawfish, humpback chub, bonytail chub, and the state-protected razorback sucker will be protected by designation of Cross Mountain Canyon ACEC (see RMP map).
11. Wildlife habitat management plans will be prepared and implemented, emphasizing aquatic/riparian habitats for the Little Snake River, Yampa River, Vermillion Creek, Beaver Creek, Canyon Creek, Shell Creek Morgan Gulch, Milk Creek, Fortification Creek, West Timberlake Creek, Willow Creek, and Fourmile Creek.
12. Aquatic surveys will be completed on 3,000 acres of riparian and 400 acres of known wetland wildlife habitat.
13. Inventories will be conducted to determine if other riparian or wetland habitats occur in the resource area and to determine their value as wildlife habitat.
14. Wildlife watering guzzlers will be installed on Godiva Rim, Sand Wash Basin, Cross Mountain, and Dry Mountain. Additional environmental analyses will be completed and design specifications will be adhered to before any wildlife habitat improvement project is implemented.
15. Sage grouse and elk habitat will be improved on West Cold Spring Mountain by roller chopping or burning irregular shaped areas of sagebrush.
16. Elk habitat will be improved in Bald Mountain Basin and Great Divide by conducting prescribed burns.
17. Antelope distribution in Sand Wash, Powder Wash, and Great Divide will be improved by constructing 25 antelope passes, installing 2 miles of lay down panels, and constructing fence modifications.
18. Elk habitat on Dry Mountain will be improved by chaining or burning irregular shaped plots of juniper.
19. An undetermined number of springs and seeps, and associated wetlands and riparian areas, will be protected by fencing or other means that will improve the riparian habitat. Water will be transported outside the fenced area for other uses.

Resource Condition and Rationale

BLM is committed to manage and safeguard all forms of wildlife resources at prescribed and self-sustaining levels on lands it administers. BLM is responsible for coordinating the wildlife management program with all other resource uses and land management activities to ensure that wildlife objectives and protective provisions are incorporated, on an equal basis, with other resource considerations. It is BLM policy that close working relationships with state wildlife agencies be maintained and that the planning and implementation of wildlife habitat improvement, maintenance, and protection programs be coordinated closely with the state's wildlife management priorities.

Because the Little Snake Resource Area supports an extraordinarily large number of mule deer, a rapidly expanding elk herd, varied small game, varmint, and furbearer populations, and consists of large consolidated blocks of readily accessible public land, the area remains one of the most highly regarded locations in Colorado for sport hunting.

Implementation Priorities

The following management actions need to be implemented during the first five years following approval of this plan. The order in which these actions are listed does not indicate an order of implementation.

- Initiate monitoring studies on M and I category allotments, including 13 conflict allotments, to yield information needed to make decisions on wildlife numbers.
- Prioritize monitoring studies on allotments according to those exhibiting the worst forage conditions.
- Wildlife habitat management plans will be prepared and implemented, emphasizing aquatic/riparian habitat for the Little Snake River, Canyon Creek, Fortification Creek and West Timberlake Creek.
- Aquatic surveys will be completed on 3,000 acres of riparian and 400 acres of wetland wildlife habitat.

- Inventories will be conducted to determine if other riparian or wetland habitats occur in the resource area.
- Wildlife watering guzzlers will be installed on Godiva Rim.
- Elk habitat on Dry Mountain will be improved by chaining or burning irregular shaped plots of juniper.
- An undetermined number of springs and seeps and associated wetland and riparian areas will be proptected by fencing or other means that will improve the riparian habitat. Water will be transported outside the fenced area for other uses.

Monitoring

Wildlife monitoring studies will be initiated immediately on M and I category allotments, including 13 conflict allotments, to yield information needed to make decisions on wildlife numbers. Monitoring studies will also be initiated on allotments exhibiting worst forage conditions. The level of survey will depend on funding, staff, and forage condition.

Support

Engineering, surface reclamation, hydrologic, soils, and archaeologic support will be required for the design and construction of projects. Other resource specialists will assess impacts of proposed projects and identify mitigation, if needed. Fire management support will be used for managing natural fire and prescribed burns. Cadastral survey will locate public land boundaries.

Threatened/Endangered, Candidate, and Sensitive Plants

Objectives

- Protect, conserve, and manage Colorado BLM sensitive plant species and locations with adjacent critical sites that affect their habitat. If any threatened/endangered or candidate plant species is identified in the Little Snake Resource Area, it would be protected through no-surface-occupancy stipulations and any other actions needed to prevent its deterioration and allow its recovery.

Planned Actions

1. Proposed project locations likely to harbor threatened/endangered, candidate, and Colorado BLM sensitive plants will be surveyed before project development. Section 7 of the Endangered Species Act says consultation procedures with the USFWS will be implemented when a "may affect" determination is made for listed threatened and endangered species.
2. If identified, threatened, endangered, and candidate species would be protected through no-surface-occupancy stipulations.
3. Identified Colorado BLM sensitive plants will be protected through avoidance stipulations. When applied, the avoidance stipulation will include the following: "habitat of known populations of Colorado sensitive plans, and those remnant vegetation associations specifically identified, will be protected from human induced activities to the extent such mitigation of impacts to these resources does not unduly hinder or preclude the exercise of valid existing rights. For Colorado BLM sensitive plants, the area of protection will include the actual location of the population and, if present, adjacent critical sites that affect their habitat."
4. Colorado BLM sensitive plants will be protected by designation of Limestone Ridge ACEC/RNA, Cross Mountain Canyon ACEC, Irish Canyon ACEC, and Lookout Mountain ACEC (see Resource Management Plan Map).

Resource Condition and Rationale

Protection of threatened and endangered plant species is required and directed by the Endangered Species Act of 1973. Protection of candidate and sensitive plants and remnant vegetation associations is discretionary, with guidance provided by BLM policy. The approved actions were developed only after careful consideration of all applicable factors including: important and/or unique environmental values, alternative potential resource uses and anticipated effects, historic and existing resource uses and effects, public concern, multiple-use management principles, and all relevant laws and policy. Colorado BLM sensitive plant populations will be maintained in a stable or improving condition.

Implementation Priorities

The following actions need to be implemented during the first five years following approval of this plan. The order in which these actions are listed does not indicate an order of implementation. Management plans will be written and implemented for Limestone Ridge ACEC/RNA, Cross Mountain ACEC, Irish Canyon ACEC, and Lookout Mountain ACEC. (See Management Units 13A-D in the Management Units Section.)

Monitoring

Individual actions with the potential for adversely affecting known populations of sensitive plants and selected remnant vegetation associations will be monitored at the construction phase, as deemed necessary on a case-by-case basis, to ensure compliance with the no-surface-occupancy stipulation or other pertinent mitigation.

Monitoring programs, which have been developed in conjunction with the Colorado Natural Areas Program, will continue on selected important plant species populations and plant association occurrences. New monitoring may be established on additional populations/occurrences as determined by BLM. All monitoring is contingent upon future funding levels. Data obtained from monitoring studies will be used to determine the effectiveness of BLM's measures and to develop future management recommendations.

Support

Other resource specialists will develop management plans for ACECs, will assess impacts of proposed projects in or near known Colorado BLM sensitive plant locations, and will identify mitigative measures, if needed. Cadastral survey will locate public land boundaries.

Wild Horses

Wild horse management will continue according to decisions approved in the Sand Wash Herd Management Area Plan. The plan designates the areas on which horses will be managed and states how the maintenance of a viable herd will be achieved. The following section summarizes the major aspects of wild horse management applicable to the Sand Wash Herd.

Objectives

- To protect wild free-roaming horses in the Sand Wash Basin from unauthorized capture, branding, harassment, and destruction.
- To manage herds of wild horses as an integral part of the public lands ecosystem under the principle of multiple use.
- To manage wild horse habitat to achieve and maintain a thriving natural ecological balance.
- To maintain current data about wild horse populations and their habitat.
- To remove excess wild horses periodically to maintain appropriate management levels on the herd management area.
- To remove wild horses that stray from Sand Wash as soon as practical.

Planned Actions

1. Habitat condition in Sand Wash Basin will be managed to maintain an appropriate management level of 130 to 160 wild horses.
2. An annual census will be taken to monitor the growth of the horse herd. Surplus wild horse will be removed once herds reach 250 head or when special situations, such as drought, threaten the horses with water or forage shortages.
3. A monitoring program will be established to determine annual utilization of key forage plants and vegetation trends within the Sand Wash Basin.
4. The Sand Wash Basin Herd Management Area Plan will continue to be used to guide the management of wild horses in this area.

Resource Conditions and Rationale

- Maintaining grazing animals at a level consistent with forage production will allow for a viable wild horse population, livestock for red meat production, and productive wildlife populations without damage to the range resource.
- Improved range conditions will provide improved habitat for wild horses. Increased desirable forage will provide improved nutrition for wild horses and will improve soil erosion conditions within the herd area.
- Maintenance of the free-roaming behavior of wild horses would help maintain normal band integrity and herd interactions. In addition, it is one method of providing an interchange of the gene pool and lessening the occurrence of interbreeding within the herd unit.
- Maintenance of a healthy, viable breeding population will ensure the survival of wild horses within the herd management area.
- Protection of wild horses from harassment and unauthorized capture is required by the Wild and Free-Roaming Horse and Burro Act (Public Law 92-195) and is necessary to maintain a healthy, viable population.

Implementation Priorities

Continue present management to achieve goals outlined in the Sand Wash Basin Herd Management Area Plan, subject to available funding.

Monitoring

BLM personnel will periodically conduct aerial surveys to monitor total number of horses, number and size of herds, and herd movement. In addition, herd composition, productivity, and mortality estimates will be based on samples taken during horse removals.

Support

Engineering, surface reclamation, hydrologic, soils, and archaeologic support will be required in the design and construction of projects. Other resource specialists will assess impacts of proposed projects and will identify mitigation, if needed. Fire management support will be used to manage natural fire and prescribed burns.

Soil and Water Resources

Objectives

- Prevent deterioration of soil conditions and stabilize and rehabilitate areas where accelerated erosion and runoff have resulted in unacceptable resource conditions.
- Prevent disturbance to fragile soil areas where resulting erosion could not be controlled.
- Maintain the integrity of streams and their associated riparian values on public lands that meet state water quality standards and have acceptable channel stability.
- Protect from further degradation and, if feasible, improve the quality of those streams and their associated riparian values that do not meet state water quality standards and do not have acceptable channel stability.
- Protect and maintain present groundwater quality and quantity.

Planned Actions

1. Soil and water resources will be protected through mitigation or restrictions applied to surface- and underground-disturbing activities, as needed, on a case-by-case basis. Water quality parameters will conform to state water quality standards.

2. The fragile soil and water areas (Vermillion Management Unit) identified below (and shown on the RMP map) are areas where soil erosion potential is known to exist.

   a. The fragile soil areas listed below encompass approximately 2 to 3 percent of the total acres within the resource area.

      (1) The area along Canyon Creek, including the adjacent steep side slopes, to approximately 1/2 mile either side of the creek (the actual boundary will be drawn based on topography).

      (2) The area along Shell Creek, including the adjacent steep side slopes, to approximately 1/2 mile either side of the creek (the actual boundary will be drawn based on topography).

      (3) The area along Vermillion Creek, including the adjacent steep side slopes, to approximately 1/2 mile to either side of the creek (the actual boundary being based on topography), downstream to the confluence with Douglas Draw.

      (4) The area along Sand Wash, including the adjacent side slopes, to approximately 1/2 mile either side of the wash (the actual boundary to be drawn based on topography), from section 10, T. 9 N., R. 99 W., to the confluence with Dugout Draw.

      (5) The area along Yellow Cat Wash, including the adjacent side slopes, to approximately 1/2 mile either side of the wash (the actual boundary being based on topography), from section 12, T 9 N., R. 98 W., to the confluence with Sand Wash.

      (6) The area along Dry Creek, including the adjacent side slopes, to approximately 1/2 mile either side of the creek (the actual boundary to be based on topography), from section 22, T. 11 N., R. 99 W., to the confluence with Vermillion Creek.

      (7) The northwest facing slopes of the Vermillion Bluffs, from the Vermillion Bluffs ridgetop road downslope to the Dry Creek drainage.

   b. Performance objectives apply to all surface-disturbing activities within fragile soil areas. If the performance objectives cannot be met, surface occupancy will not be permitted on federal surface. On private surface with federal mineral ownership BLM will, if necessary, develop an acceptable surface-use program where the impact of development of federal minerals may impact off-lease lands or resources. The following performance objectives have been established for fragile soils:

(1) Maintain the soil productivity by reducing soil loss from erosion and through proper handling of the soil material.

(2) Reduce impact to off-site areas by controlling erosion and/or overland flow from these areas.

(3) Protect water quality and quantity of adjacent surface and groundwater sources.

(4) Reduce accelerated erosion caused by surface-disturbing activities.

(5) Select the best possible site for development to reduce the impacts to the soil and water resources.

c. All proposed surface-disturbing activities within fragile soil areas will undergo a site-specific review at the resource area and/or district level. Special performance standards (listed below) will be applied to these activities as well. If the performance objectives through application of the performance standards cannot be met, surface occupancy will not be authorized.

To achieve the performance objectives, BLM has identified the following performance standards that may apply to surface-disturbing activities. These standards are presented to identify the types of mitigative measures that may be necessary, based on the type of activity to be permitted, the timing of development activities, the geographical location, specific soil types and conditions, etc. Depending on these variables, an applicant must demonstrate that the performance objectives have been met either through a plan of development, using alternative measures, or through use of the mitigative measures identified below.

(1) All sediments generated from the surface-disturbing activity will have to be retained on site.

(2) Construction or other surface-disturbing activities will not be allowed when the soils are saturated to a depth of more than 3 inches.

(3) Vehicle use will be limited to existing roads and trails.

(4) All new permanent roads will be built to meet primary road standards (BLM standards); their location will be approved by the authorized officer. For oil and gas purposes, permanent roads are those used for production.

(5) All geophysical and geochemical exploration will be conducted by helicopter, horseback, on foot, or from existing roads.

(6) Any sediment-control structures, reserve pits, or disposal pits will be designed to contain a 100 year, 6 hour storm event. Storage volumes within these structures will have a design life of 25 years.

(7) Before reserve pits, production pits, or emergency pits can be reclaimed all residue will be removed and trucked off site to an approved disposal site.

(8) Reclamation of disturbed surfaces will be initiated before November 1 each year.

(9) All reclamation plans will be approved by the authorized officer in advance and might require a bond, if one has not been previously posted.

These requirements do not supersede valid existing rights on approved applications for permits to drill, developing leases, or entry under the general mining laws. They do apply to all new oil and gas leases and to all surface-disturbing activities permitted under this plan. BLM will work with operators/permittees to achieve performance objectives on undeveloped leases or permits consistent with previously granted lease rights.

3. Rights-of-way construction will be allowed along Moffat County roads 4, 67, and 126 on a case-by-case basis and may not have to meet the specific requirements outlined in 2.C.(1)-(9). Stipulations will be applied to the right-of-way activity at the approval stage.

4. Surface-disturbing activities on isolated sites that meet fragile soil criteria (a-b below) will be subject to the performance objectives/standards listed under 2b. and 2c. above. Surface disturbance will be allowed only where the performance objectives/standards can be met.

Fragile soil criteria areas are:

a. Areas rated as highly or severely erodible by wind or water, as described by the Soil Conservation Service in the Area Soil Survey Report or as described by on-site inspection.

b. Areas with slopes greater than or equal to 35 percent, if they also have one of the following soil characteristics: (1) a surface texture that is sand, loamy sand, very fine sandy loam, fine sandy loam, silty clay, or clay; (2) a depth to bedrock that is less than 20 inches; (3) an erosion condition that is rated as poor; or (4) a K factor of greater than .32. (See Table 5).

5. Range and water projects will be developed and implemented in order to encourage the relocation of livestock from within fragile soil and water areas. Where necessary, fencing will be used to improve the management of riparian areas; an alternate water source will be provided.

management of riparian areas; an alternate water source will be provided.

TABLE 5

POTENTIAL FRAGILE SOILS AREAS WITHIN THE LITTLE SNAKE RESOURCE AREA [1]

Area	Estimated Acreage
Portions of Buffalo Gulch/ Twelvemile Mesa Area	4,000
Along some upper tributaries of Sand Wash	3,000
Along some western tributaries of the Little Snake River	17,000
Along some eastern tributaries of the Little Snake River	5,000
Along portions of Sand Creek	2,000
Along portions of Conway Draw	1,000
Portions of the Deception Creek Area	1,000
Total	33,000

[1] This is only a partial listing of fragile soil areas within the resource area and other sites may meet the fragile soils criteria.

6. No-surface-occupancy stipulations will be established from within 500 feet to 1/4 mile of perennial water sources, depending on the type of source, use of source, soil type, and slope steepness.
7. Construction will be allowed within or near intermittent drainages and their floodplains only after completing a case-by-case analysis of soil type and slope steepness of the drainage. Compliance with Executive Order 11988 will be ensured. These actions will not preclude road crossings built to BLM specifications.
8. To ensure that unstable areas are avoided, accelerated erosion is prevented, and detailed soil information is made available, detailed soil surveys will be conducted on timber harvesting areas of Diamond Peak/Middle Mountain and Douglas Mountain.
9. The remaining water quality and quantity inventory of resource area springs and seeps will be completed.
10. Groundwater quality and aquifers will be inventoried within selected areas of the resource area.
11. Water quality and watershed activity plans will be developed in areas with potential for water quality improvements. The potential for salinity control projects on BLM-administered public lands in the Milk Creek, Vermillion Creek, and Little Snake River watersheds will be analyzed.
12. Nonpoint sources of pollution will require that management actions be coordinated with federal, state, and local agencies.
13. BLM roads and trails on public lands will be closed and rehabilitated if they have high erosion rates that cannot be corrected.
14. BLM will seek appropriative water rights for domestic, livestock, wildlife, and recreation uses.

Resource Condition and Rationale

Soil and water resources must be maintained and improved to provide for all other biological production. Soil and water resources will be protected through mitigative measures applied to surface-disturbing activities and the development of watershed activity plans.

Implementation Priorities

The following management actions must be implemented during the first five years following approval of this plan. The order in which these actions are listed does not indicate an order of implementation.

- Complete water quality and quantity inventory of resource area springs and seeps.
- Inventory groundwater quality and aquifers in selected areas of the resource area.
- Develop water quality and watershed activity plans in areas with potential for water quality improvement projects.
- Analyze the potential for salinity control projects on BLM administered public lands in the Milk Creek, Vermillion Creek, and Little Snake River watersheds.
- Identify and close BLM roads and trails that have high erosion rates that cannot be corrected.
- Seek appropriative water rights for domestic, livestock, wildlife, and recreation uses.

Monitoring

Monitoring of surface water and groundwater resources will continue to be applied on a case-by-case basis to all actions on public lands which could impact these resources.

Support

Engineering, surface reclamation, and archaeologic support will be required in the design and construction of projects. Other resource specialists will assess impacts of proposed projects and identify mitigative measures, if needed. Cadastral survey will locate public land boundaries.

Forest Lands and Woodlands

Objectives

Manage the suitable pinyon-juniper woodlands and commercial forest lands to maintain stand productivity and to help meet fuelwood and saw timber demand on a sustained-yield basis.

Planned Actions

1. Existing 10-year forest management plans will continue for Diamond Peak/Middle Mountain and Douglas Mountain.
2. Commercial forest lands (6,330 acres) will be managed to produce a variety of forest products on a sustained yield basis. Limited management (such as natural revegetation and minimal cultural treatments) will apply to remaining commercial forest lands. Allowable harvest levels under a sustained yield have been calculated at 300,000 board feet per year. The allowable harvest will be recalculated periodically based on updated inventories.
3. Approximately 37,600 acres of woodland will be managed to produce a variety of woodland products on a sustained-yield basis. Limited management will apply to the remaining woodland acreage. Annual allowable woodland harvest levels under a sustained yield have been calculated at 2,500 cords, or 1.25 million board feet per year. The allowable harvest will be recalculated periodically based on updated inventories.
4. Access will be acquired for future timber sales (see Map 2).
5. Public harvest areas will be opened to meet local demand.

Resource Condition and Rationale

Advertised and negotiated sales of forest products will continue to meet local and regional demand for both commercial and individual harvest. This type of management will allow harvesting of timber products while ensuring their perpetuity within the principles of multiple-use management.

Implementation Priorities

None identified.

Monitoring

Monitoring of specific surface-disturbing activities will occur on a case-by-case basis to ensure adherence to pertinent stipulations/mitigations.

Support

Engineering, surface reclamation, hydrologic, soils, and archaeologic support will be required in the design and construction of projects. Other resource specialists will assess impacts of proposed projects and identify mitigative measures, if needed. Fire management support will be needed for managing natural fire and prescribed burns. Cadastral survey will locate public land boundaries.

Fire Management

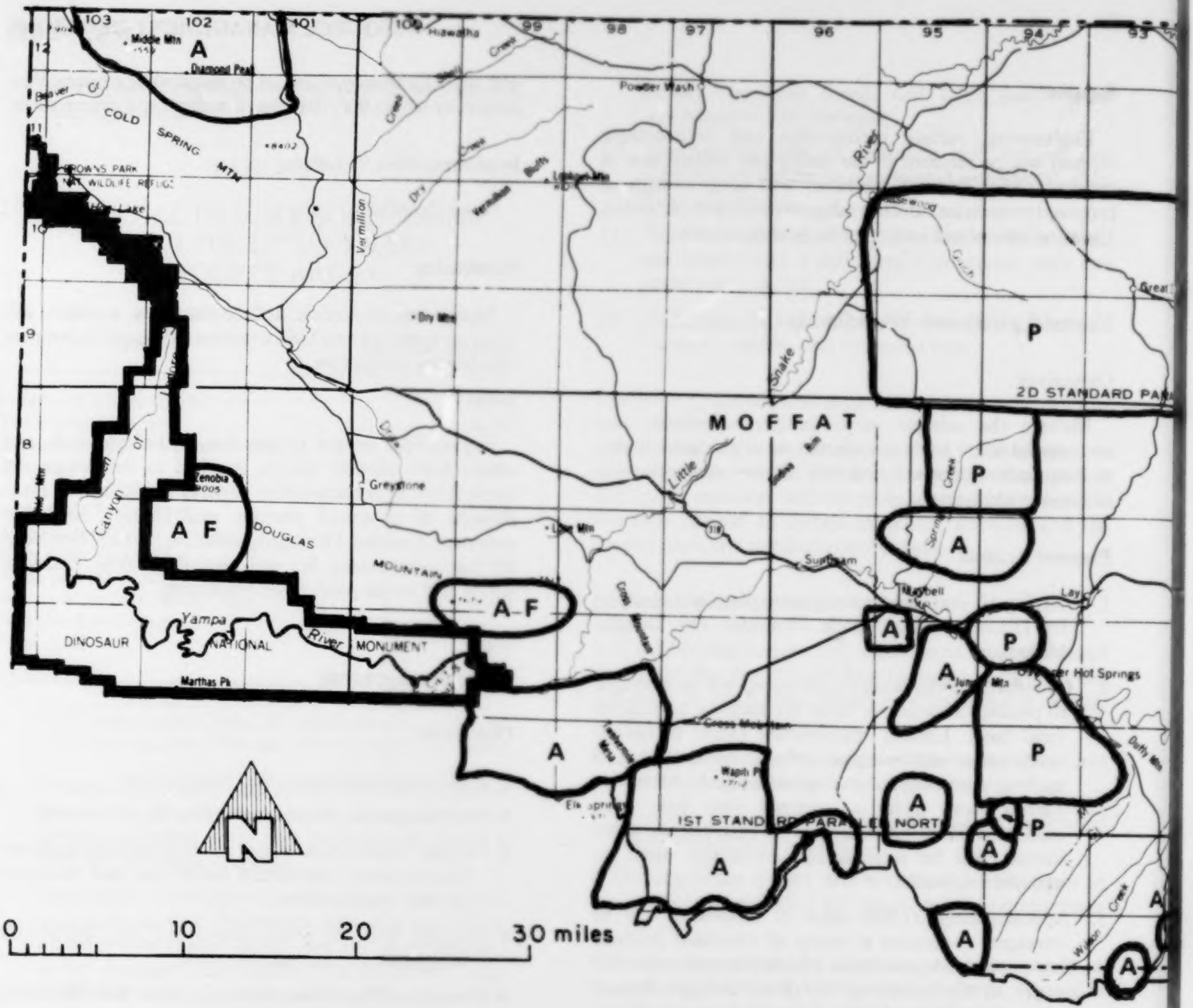
Objectives

In full suppression zones the objectives are:

- Give first priority to personal safety, life, or property.
- Prevent wildfire from causing any tree mortality in current and proposed commercial timber sale and woodland product contract areas.
- Prevent wildfire from destroying any perishable designated cultural resource sites.
- Prevent wildfires from destroying areas with significant riparian values.

In conditional suppression zones, where conditions may not warrant the highest level of fire suppression, the objectives are:

- Suppress all wildfires by taking appropriate suppression action. Appropriate actions will be based upon preplanned analysis consistent with land management objectives including the threat of life and property, economic evaluations, and resource constraints.
- Use suppression strategies which do not require unnecessary exposure of firefighters and equipment to threatening situations.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Vermillion
Snake River
Little Snake River
Greystone
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Maybell
Lay
Juniper Mtn
Juniper Hot Springs
Cross Mountain
Powder Wash
Diamond Peak
Middle Mtn
Zenobia Pk
Marthas Pk
Elk Springs
2D STANDARD PARALLEL
1ST STANDARD PARALLEL NORTH
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100
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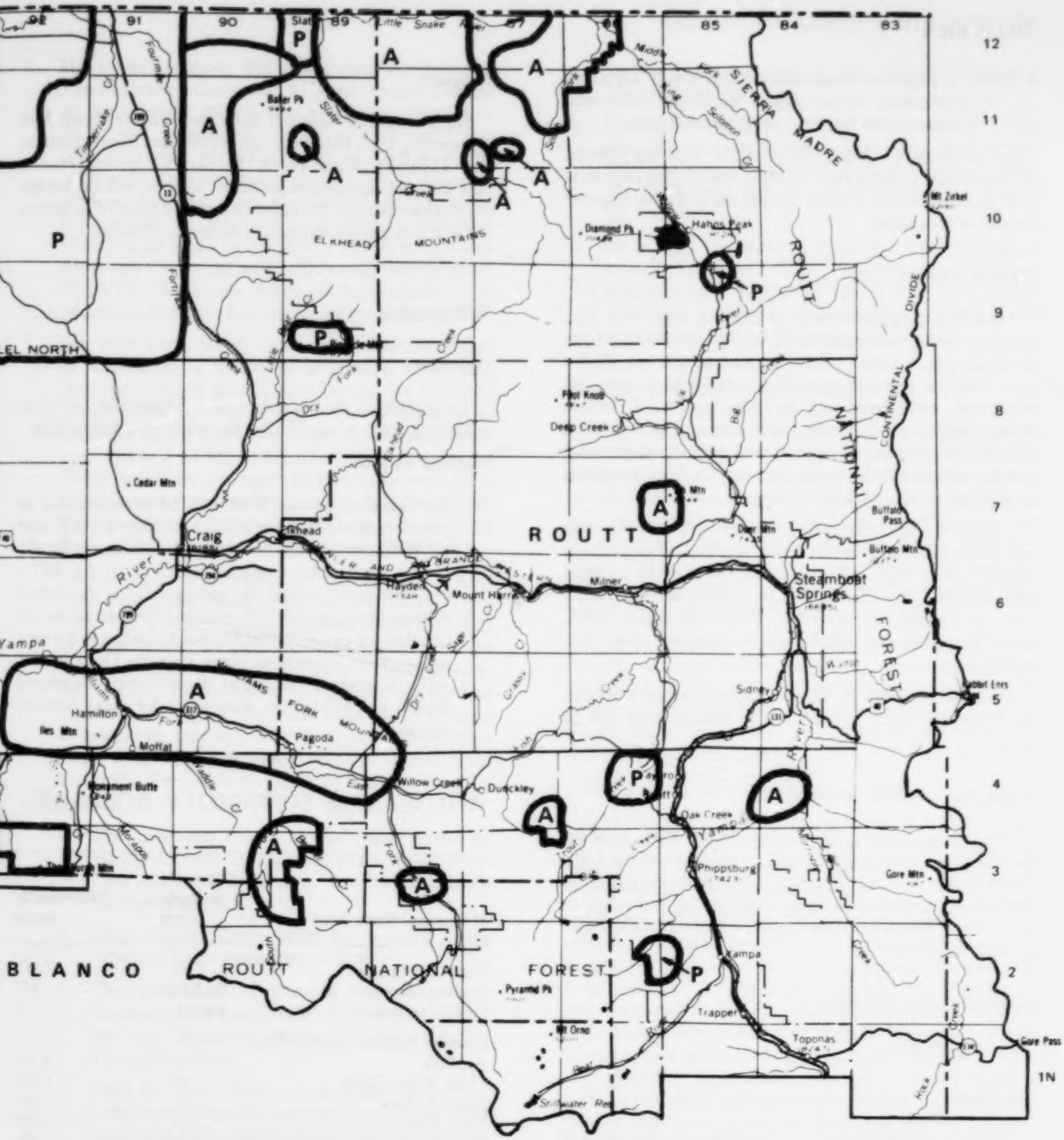
A - Access Needed (AF areas primarily require access for forestry; the rest of the A areas require recreation access)

P - Posting of Boundaries Needed

Map 2. Access and Boundary Posting Needs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Little Snake River
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Slater
Fourmile Creek
Timberlake Cr
ELKHEAD MOUNTAINS
Diamond Pk
Hahns Peak
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SIERRA MADRE
Solomon Cr
King
Mt Zirkel
ROUTT
CONTINENTAL DIVIDE
NATIONAL
FOREST
EL NORTH
Fortification
Little Bear Cr
Dry Fork
Elkhead
Pilot Knob
Deep Creek
Cedar Mtn
Craig
Elkhead
River
Yampa
ROUTT
Deer Mtn
Buffalo Pass
Buffalo Mtn
DENVER AND RIO GRANDE WESTERN
Hayden
Mount Harris
Milner
Steamboat Springs
Walton
Sidney
Rabbit Ears
WILLIAMS FORK MOUNTAINS
Hamilton
Iles Mtn
Pagoda
Moffat
Monument Butte
Willow Creek
Dunckley
Oak Creek
Yampa
Phippsburg
Gore Mtn
Morapos
Thornburgh Mtn
BLANCO
ROUTT
NATIONAL
FOREST
Pyramid Pk
Yampa
Trapper
Toponas
Mt Orno
Stillwater Res
Bear
Rock Creek
Gore Pass

- Utilize appropriate suppression actions which will avoid all unnecessary impairment of wilderness values and is consistent with Interim Management Policy.

In prescribed fire zones, the objective is to use planned and unplanned ignition meet the objectives of other resources, such as livestock and wildlife for the use of fire to improve vegetative conditions.

Planned Actions

Maximum suppression will be used on areas with high resource values, structures, commercial forest, oil and gas developments, cultural values, improvements, etc. Buffer areas near or adjacent to critical management areas for threatened, endangered and candidate species, Colorado BLM sensitive plant species, and research natural areas (RNAs), will require full protection. Maximum suppression will be used in other areas to prevent fire from spreading to adjacent private property/structures.

Conditional fire suppression will be used in areas with resources of low value or that do not warrant full suppression actions and/or high suppression costs. Fires in the Douglas Mountain area [five Dinosaur adjacent wilderness study areas (WSAs) Diamond Breaks WSA, West Cold Spring WSA, and Cross Mountain WSA] will be handled under this strategy.

Prescribed fire will be used to improve resource habitat, condition, etc. Both planned and unplanned fires will be used.

Resource Condition and Rationale

The Craig District Fire Management Plan provides guidance for proper management of wildfires in the Little Snake Resource Area. The plan will permit the option of immediate suppression in areas requiring full protection or allow a conditional response in areas where desired resource benefits will occur.

Implementation Priorities

None identified

Monitoring

All fires will be monitored for resource damage and reclamation will be planned accordingly. All fire reclamation will be monitored to determine success.

Support

Support will be required from the Western Slope Fire Operations, U. S. Forest Service, Moffat and Routt counties, and Colorado State Forest Service for presuppression planning and suppression activities. Support will be needed from other resource specialists to assess impacts of proposed projects and identify mitigative measures, if needed.

Wilderness

Objectives

To determine the suitability or non-suitability of eight wilderness study areas (WSAs) for wilderness designation.

Planned Actions

1. The Diamond Breaks WSA will be recommended as preliminarily suitable for wilderness designation (Table 6). If Congress does not designate Diamond Breaks as wilderness, the Colorado portion of the WSA (31,480 acres) would be managed as a recreation management unit; the Utah portion (3,900 acres) would be managed by the Vernal District according to existing management framework plans. (See the Draft RMP/EIS Wilderness Technical Supplement, Diamond Breaks No Wilderness Alternative for more detailed discussion.)

TABLE 6

WILDERNESS SUITABILITY ACREAGES

Wilderness Study Area	Preliminarly Suitable Acres	Nonsuitable Acres
West Cold Spring	0	17,682
Diamond Breaks	36,240 *	340
Cross Mountain	14,081	0
Dinosaur Adjacent North WSAs		
Ant Hills	0	4,354
Chew Winter Camp	0	1,320
Peterson Draw	0	5,160
Tepee Draw	0	5,490
Vale of Tears	0	7,420
Total	50,321	41,766

* 1,200 acres added to enhance manageability.

2. The Cross Mountain WSA (including the proposed Cross Mountain Canyon ACEC) will be recommended as preliminarily suitable for wilderness designation. BLM will recommend that the proposed Cross Mountain wilderness remain open to oil and gas leasing with no-surface-occupancy stipulations. If Congress does not designate Cross Mountain as wilderness, the area would be managed as a special recreation management area (13,000 acres), including the Cross Mountain Canyon ACEC (3,000 acres). (See the Draft RMP/EIS Wilderness Technical Supplement, Cross Mountain Preferred Alternative, for more details.)
3. The West Cold Spring WSA will be recommended as nonsuitable for wilderness designation. If Congress does not designate the area as wilderness, the Colorado portion of West Cold Spring would be managed as the Cold Spring and Little Snake River management units (total of 14,482 acres). The Utah portion of the WSA would be managed under the Brown's Park Management Framework Plan. (See the Draft RMP/EIS Wilderness Technical Supplement, West Cold Spring Preferred Alternative for more information.)
4. Four WSAs evaluated under Section 202 of the Federal Land Policy and Management Act (FLPMA) — Ant Hills, Chew Winter Camp, Peterson Draw, and Vale of Tears — will be recommended as nonsuitable for wilderness designation but would be recommended to the Secretary for forwarding to Congress for the final decision. If Congress does not designate these areas as wilderness, they would be managed as follows (see Draft RMP/EIS Wilderness Technical Supplement, Preferred Alternative for each of these WSAs, for details).
    a. The northwest corner of Ant Hills would be managed as the Douglas Mountain Management Unit and the remainder as the Scattered Sands Management Unit.
    b. Chew Winter Camp would be managed as the Scattered Sands Management Unit.
    c. The north third of Peterson Draw would be managed as the Scattered Sands Management Unit and the remainder as the Douglas Mountain Management Unit.
    d. Most of Vale of Tears would be managed as the Little Snake River Management Unit and the other portions in the northwest corner would be managed as the Douglas Mountain and Scattered Sands Management Units.
5. Tepee Draw, the fifth WSA evaluated under Section 202 of FLPMA, is dropped from further consideration and will be managed as the Douglas Mountain Management Unit.
6. Except for the Tepee Draw WSA, WSAs would continue to be managed in compliance with BLM's Interim Management Policy (BLM, Revised November 10, 1987) until they were reviewed and acted upon by Congress.
7. Public land designated as wilderness will be managed in compliance with BLM's Wilderness Management Policy and the Wilderness Act of 1964. Site-specific wilderness management plans will be developed for areas designated by Congress as wilderness.

Resource Conditions and Rationale

Only Congress has the authority to add areas to the National Wilderness Preservation System. After wilderness designation, a wilderness management plan will be written for each area designated. Areas designated as wilderness will be managed under provisions of the Wilderness Act to preserve wilderness character and provide for recreational, scenic, scientific, educational, conservation, and historical use. Areas designated nonsuitable will be released from wilderness review and managed for other uses.

Until Congress makes its decision on whether or not to designate an area as wilderness, BLM's Interim Management Policy will be followed, and the WSAs will be patrolled periodically to detect and prevent unauthorized actions which could impair the suitability of such areas for preservation as wilderness.

Rationale for recommendations by WSA:

DIAMOND BREAKS: The area is of sufficient size, exhibits a high degree of naturalness, and has outstanding opportunities for solitude and primitive recreation. No management conflicts are anticipated.

CROSS MOUNTAIN: The area is of sufficient size, exhibits a natural environment, contains threatened or endangered species, has outstanding geologic features, has a high potential for cultural resources, has outstanding scenic features, contains a herd of bighorn sheep, contains a segment of the Yampa River which is listed on the Nationwide Rivers Inventory List, and has outstanding opportunities for solitude and primitive unconfined recreation. The long-term protection of these wilderness values would be assured only through legislative protection. The area can be managed as wilderness.

WEST COLD SPRING: While the area possesses wilderness characteristics of naturalness, and outstanding opportunities for solitude and primitive unconfined recreation, BLM feels the values of this area can be protected through multiple use management, while allowing oil and gas development.

ANT HILLS, CHEW WINTER CAMP, PETERSON DRAW, AND VALE OF TEARS: These four WSAs share land forms with Dinosaur National Monument and, when considered with lands in the monument that are administratively proposed as wilderness, do have outstanding opportunities for solitude and primitive, unconfined recreation. They do not however, possess these qualities on their own. Ant Hills, Chew Winter Camp, and Peterson Draw WSAs are not separated physically and, therefore, could be combined into one WSA. Because of the land forms, characteristics, and values these WSAs have in common with the monument, it is appropriate that they be considered by Congress for BLM management as wilderness or BLM management for other uses.

TEPEE DRAW: Although many wilderness characteristics are present, this WSA does not in and of itself possess outstanding wilderness values and does not add significantly to values within Dinosaur National Monument. Therefore, it is not recommended as suitable for wilderness designation.

Implementation Priorities

Prepare a wilderness study report for seven WSAs, and prepare a final wilderness environmental impact statement for submission to Congress.

Section 603 of FLPMA directs the Secretary of the Interior to review areas of 5,000 acres or more of the public land determined to have wilderness characteristics and to recommend to the President the suitability of each area for preservation as wilderness. The Secretary is required to report his recommendations to the President by October 21, 1991, and the President is required to report his recommendations to Congress by October 21, 1993. Congress ultimately decides whether to designate areas as wilderness.

The decision to recommend the WSAs as suitable or nonsuitable became effective upon signature of this plan. Wilderness recommendations could change during administrative review and, therefore, are considered preliminary at this time. Additional planning and environmental analysis will be necessary before they are designated or not designated as wilderness by Congress.

Following the completion of the resource management plan, a wilderness study report identifying the wilderness suitability or nonsuitability recommendations for each WSA will be prepared and submitted to Congress. The wilderness study report will be accompanied by a separate final environmental impact statement on the wilderness portion of this plan. Mineral surveys have been completed by the U. S. Geological Survey and the U. S. Bureau of Mines for WSAs recommended as preliminarily suitable for wilderness designation.

Monitoring

Until Congress makes its decision whether or not to designate an area as wilderness, BLM's Interim Management Policy will be followed. The WSAs will be patrolled periodically to detect and prevent unauthorized actions which could impair their suitability for preservation as wilderness. Following congressional action, a wilderness management plan will be prepared for any area designated as wilderness. A monitoring plan will be included in the wilderness management plan.

Support

If an area is designated as wilderness, cadastral survey support to define some wilderness boundaries would be requested. Support would also be requested from the operations staff for easements and land acquisition.

Natural History (Areas of Critical Environmental Concern)

Objective

To protect identified areas that contain important historic, cultural, scenic, and natural values or to protect human life and safety from natural hazards, pursuant to the FLPMA and BLM regulations at 43 CFR 1610.

Planned Actions

1. The following sites, totaling 22,530 acres, are designated to protect or enhance the values noted:
    a. Limestone Ridge ACEC/RNA (1,350 acres; remnant plant associations, Colorado BLM sensitive plant species, scenic quality).
    b. Irish Canyon ACEC, including the Ink Springs area (11,680 acres; remnant plant associations, Colorado BLM sensitive plant species, geologic values, cultural resources, scenic quality).
    c. Lookout Mountain ACEC (6,500 acres; Colorado BLM sensitive plant species, scenic quality).
    d. Cross Mountain Canyon ACEC (3,000 acres; threatened and endangered species, Colorado BLM sensitive plant species, scenic quality).

2. Management plans will be written for each designated site. Each site will also be monitored.
3. Remnant plant associations will be protected through avoidance stipulations in Ace in the Hole, Hells Canyon, G Gap, Vermillion Creek, Vermillion Bluffs, and Horse Draw. (An example of an avoidance stipulation can be found under Threatened/Endangered, Candidate, and Sensitive Plants.)
4. Memorandums of understanding or agreement will be developed with the Colorado Natural Areas Program, the Nature Conservancy, and other interested agencies or groups to provide recommendations on protecting, managing, and studying the unique resource values found in the designated areas and elsewhere in the resource area. BLM would retain sole management responsibility.

Resource Condition and Rationale

All four ACECs meet the required identification criteria of relevance and importance pursuant to 43 CFR 1610.7-2(a) and BLM Manual Section 1617.81(C). All of these areas contain important ecological values (sensitive plants) which require special management to ensure their protection.

Implementation Priorities

The four ACEC designations became effective upon approval of this plan. ACEC activity plans will be prepared to more specifically guide protection and management of important resources located at each of the designated sites. Priority for activity plan preparation is:

1. Limestone Ridge ACEC/RNA
2. Cross Mountain Canyon ACEC
3. Irish Canyon ACEC
4. Lookout Mountain ACEC

All project proposals and land-use applications will be analyzed to ensure they do not conflict with the ACECs. Resource use limitations for the sites will be strictly adhered to, as will the detailed management prescriptions upon completion of specific ACEC activity plans.

Monitoring

Ongoing monitoring will continue to ensure maintenance of the important plant values contained within ACECs. Additional monitoring may be necessary according to specific activity plans. Data obtained from monitoring studies will be used to verify the effectiveness of 1) resource use limitations identified in this RMP, 2) any additional management measures developed as a result of activity planning, and 3) to develop future management recommendations.

Support

Support will be required from resource specialists to prepare and review activity plans.

Recreation Management

Objectives

- Protect and maintain a diversity of outdoor recreation opportunities, activities, and experiences.
- Provide high quality visitor services, including interpretive information.
- Maintain established recreation opportunity spectrum classes upon implementation of all planned management actions.
- Ensure maintenance and minimize degradation of existing visual resource management classes.

Planned Actions

1. The Little Yampa/Juniper Canyon area (19,840 acres) will be administered as a special recreation management area to provide unrestricted flatwater river floatboating in the region. The area is divided into upper (4,480 acres) and lower (15,360 acres) units. Periodic use supervision will be provided. Access will be negotiated for parking areas at put-in and take-out points. Other facilities will be constructed as needed for public sanitation and safety. A map/brochure will be developed to promote visitor health and safety, provide resource protection, and inform the public of available opportunities. Limited signs will be provided for information, direction, and interpretation. A Little Yampa/Juniper Canyon Recreation Area Management Plan will be developed.
2. The remainder of the resource area will receive limited management as an Extensive Recreation Management Area where recreation use is dispersed and requires only minimal management. BLM will provide basic information on public safety and recreation opportunities within the resource area, and provide access and minimal facilities as demand warrants.
3. BLM lands within Cedar Mountain (880 acres) will be managed as part of the Extensive Recreation Management Area for environmental education, hiking, and viewing. Trails and signs will be provided for

information and interpretation. Leasing of the shooting range site will continue with stipulations for sanitation, visual design, and safety; more public use will be allowed.

4. BLM lands within Cold Spring Management Unit (approximately 54,000 acres) will be managed as part of the Extensive Recreation Management Area, primarily for hunting. The area will be managed under visual resource management (VRM) class II objectives to maintain scenic quality.
5. BLM lands around Wild Mountain (approximately 21,000 acres) will be managed as part of the Extensive Recreation Management Area, primarily for hunting. The area will be managed under VRM class II objectives to maintain scenic quality
6. Access to public lands will be acquired as funding and time permit in the areas listed in Table 7 and displayed on Map 2.

TABLE 7

AREAS NEEDING PUBLIC ACCESS

General Location	Public Land (Acres)
Yahoo-Squaw Mountain/ West Gilbralter Peak	10,240
Long Mountain	1,200
Bibleback Mountain	2,220
Columbus Mountain	1,100
Serviceberry Mountain	2,800
Crooked Wash/Sagebrush Creek	14,720
Danforth Hills (Escarpment Peak)	3,000
Thornburg Mountain	4,480
Clinker Knob/Coal Mountain	10,000
Iles Mountain	3,000
Williams Fork Mountains	3,000
Pole Gulch area	5,760
Four Mile and Willow Creek area (2 tracts)	5,640
Calico Draw	2,560
West Fork Cold Spring	1,600
Blacktail Mountain/Yampa River	1,840
Wapiti Peak and areas south of the peak	1,600
Elk Mountain	1,440
Citadal Plateau	640
North of Little Yampa Canyon	4,480
Juniper Mountain	5,000
Circle Ridge/Beaver Mountain/Piney Mountain/ Three Forks Mountain (scattered tracts)	2,760
Routt National Forest adjacent parcels	3,680
Axial (parcels)	1,820
Total	94,580

See Map 2 for general location of areas.

The BLM will undertake no actions nor permit any activities which could adversely affect outstandingly remarkable values of the Yampa River segments listed in the Nationwide Rivers Inventory List which make them eligible for the National Wild and Scenic River (WSR) System. Free-flowing characteristics of the identified river segments cannot be modified, to the extent the BLM is authorized under law, to control stream impoundments, diversions, or other development.

Resource Condition and Rationale

The Little Yampa/Juniper Canyon area is receiving increasing use for floatboating. Development of a recreation area management plan will promote visitor health and safety, protect resources, and make more efficient use of the available recreation opportunities.

The Cedar Mountain area is close to Craig and offers locally significant recreation opportunities. Management would minimize user conflicts, promote visitor safety, and provide resource protection.

The Cold Spring and Wild Mountain areas offer a variety of recreational settings, providing opportunities and experiences for nonmotorized or primitive types of recreation, particularly for hunting.

Demand for access to the public lands is increasing throughout the resource area and the opportunity exists for increasing the amount of land accessible to the public for recreation.

Implementation Priorities

The following management actions need to be implemented during the first five years following approval of this plan. The order in which these actions are listed does not indicate an order of implementation.

- Develop a recreation area management plan for the Little Yampa/Juniper Canyon Special Recreation Management Area.
- Schedule a study, as soon as funding permits, to provide a suitability recommendation on designation of the river segments for inclusion in the WSR System. Depending on the findings of the study, this could result in an RMP amendment.

Monitoring

Specific monitoring needs will be identified in the Little Yampa/Juniper Canyon Special Recreation Area Management Plan. In the remainder of the resource area; monitor for special recreation permit compliance and other problems related to user conflicts, resource protection, and visitor health and safety.

Support

Engineering, surface reclamation, hydrologic, soils, and archaeologic support will be required in the design and construction of projects. Support will be needed from other resource specialists to assess impacts of proposed projects and identify mitigative measures, if needed. Cadastral survey will be needed to locate public land boundaries.

Vehicle Use Management

Areas have been designated as open, limited, or closed to vehicle use as shown in Table 8. The Little Snake RMP map shows the areas listed in the table. A vehicle use implementation plan will be completed within one year of the RMP's approval.

Cultural and Paleontological Resource Management

Objectives

- To identify and protect the cultural and paleontological resources within the Little Snake Resource Area.

Planned Actions

1. Evaluate all proposed surface-disturbing actions to determine inventory needs and sites potentially impacted by such activities.
2. Ensure that all sites that are listed on, or potentially eligible for listing on, the National Register of Historic Places are identified and assessed through the Section 106 consultation process before any surface-disturbing action is permitted.
3. An overall cultural resource management plan as well as a paleontological management plan will be developed that addresses the prehistoric and historic cultural presence as well as the fossil presence in the resource area. Separate plans, on a smaller scale, would be developed to include site specific or region specific areas of the resource area. These developed plans would address the existing data gaps and research questions that have been developed in the Little Snake Resource Area Class I Overview (La Point 1987) and the Paleontological Overview (Armstrong n.d.). These future plans will be the data orientation and collection designs needed to develop the basic knowledge of these resources that has been lacking in the past.

Resource Condition and Rationale

Cultural and paleontological resources are non-renewable resources which are subject to damage with the resulting loss of scientific information. They serve the public interest by being available for scientific investigation and public education.

Implementation Priorities

Cultural and paleontological resource management plans will be developed to address the identification, protection, and monitoring of these resources within the Little Snake Resource Area. A cultural resource and paleontological management plan will be developed for the Sand Wash Basin within the next five years.

Monitoring

All known prehistoric and historic cultural resources and paleontological sites are monitored to determine effectiveness of the program. This monitoring provides the basis for additional needs that may be warranted for their management. Selected cultural and paleontological sites may have specific monitoring or excavation plans developed for them. This depends upon the potential for impacts and other circumstances that may affect individual cultural resources or paleontological sites over time.

Support

The cultural resource management and the paleontological program will receive the needed suport from the Bureau of Land Management in conducting these programs. Support will be needed from other resource specialists in the review of cultural and paleontological resource management plans.

Public Lands Retention/Disposal/Acquisition

Objectives

- To increase the overall efficiency and effectivness of public land management by identifying public land suitable for retention or disposal or lands needed for acquisition.

TABLE 8

VEHICLE USE MANAGEMENT

Designation *	Area	Acres	Purpose & Restriction
Limited (L)	Cold Spring	54,000	Recreation, wildlife habitat: existing roads & trails, seasonal closures, permitted uses
	Northern Great Divide	99,000	Wildlife habitat: existing roads & trails, seasonal closure, permitted uses
	Cross Mountain Foothills	9,000	Wildlife habitat: existing roads & trails, permitted uses
	Middle Mountain	16,500	Wildlife habitat: existing roads & trails, permitted uses
	Axial Basin	54,000	Wildlife habitat: existing roads & trails, permitted uses
	Sand Wash	8,000	Fragile soils, deteriorating watershed: existing roads & trails, seasonal closures, permitted uses
	Lower Vermillion Creek Drainage	2,900	Fragile soils, deteriorating watershed: existing roads & trails, seasonal closures, permitted uses
	Upper Vermillion Creek Drainage	30,600	Fragile soils, deteriorating watershed: existing roads & trails, seasonal closures, permitted uses
	Irish Canyon	11,680	Area of Critical Environmental Concern: designated roads & trails, permitted uses
	Lookout Mountain	6,500	Area of Critical Environmental Concern: designated roads and trails, permitted uses
	Cedar Mountain	880	Recreation area, eliminate conflicts between motorized/nonmotorized uses: designated roads & trails, permitted uses
	West Red Wash	6,500	Wildlife habitat: existing roads & trails, permitted uses
	Wild Mountain	21,000	Recreation area, reduce conflicts between motorized/nonmotorized uses: designated roads & trails, permitted uses
	Willow Creek	1,000	Wildlife habitat: existing roads & trails, permitted uses
	Little Yampa/Juniper Canyon	19,840	Special Recreation Management Area, reduce conflict between motorized and nonmotorized uses: designated roads & trails, permitted uses
Total		341,400	
Closed (C)	Diamond Breaks	36,240	Wilderness
	Limestone Ridge	1,350	Research Natural Area: closed except for permitted uses
	Cross Mountain	14,081	Wilderness
	Maybell tailings	10	Public health/safety
	Matt Trail	—	Wildlife, recreation, public safety: closed to vehicle use
Total		51,681	

* See the map of the resource management plan.

Planned Actions

1. The BLM lands in the resource area have been divided into general retention and disposal areas (see Map 3).
    a. The retention area is the existing land base to be managed under multiple use concepts. All land tenure adjustment actions (including recreation and public purposes [R&PP] actions and exchanges), except sales under Section 203 of FLPMA, will be considered on a case-by-case basis, if the public interest would be served. Section 302 leases and permits will be allowed. Conveyance actions will be precluded in wilderness and other special management areas.
    b. Disposal land tenure adjustment actions will be allowed on approximately 6,670 acres of public land that meet the criteria for disposal under applicable authority (see Appendix 3). This acreage includes land tenure adjustment actions for existing BLM authorized sanitary landfill sites near Oak Creek and Maybell located within the retention area. Section 302 leases and permits would also be allowed.
2. Acquisition of land will be pursued based on identified resource values and needs (see Map 3).

Resource Condition and Rationale

Consolidation of public land patterns into more manageable blocks would improve management efficiency. Preliminary review of available data shows that the identified disposal tracts generally contain no outstanding public use or resource values that warrant this retention in federal ownership. Acquisition of private land with special resource values would enhance resource management or benefit the public use and enjoyment of such lands.

Implementation Priorities

Priorities for disposal will be based on public demand. Acquisition priorities will be based on priorities of the resource programs for which the acquisitions are needed.

Monitoring

None required.

Support

Support will be requested from BLM resource specialists for preparing appraisal, NEPA compliance, and mineral reports and for obtaining cultural, threatened and endangered species, and paleontological clearances. Support from BLM surveyors to conduct cadastral surveys on some tracts will be required. Support from BLM appraisers will be needed for valuation of tracts to be sold, exchanged, or acquired.

Major Right-of-Way Management

Objectives

- To allow the most efficient right-of-way routes while identifing areas which would not be compatible with use as rights-of-way.

Planned Actions

1. No rights-of-way corridors are formally designated.
2. Specific areas unsuitable for major rights-of-way are shown in Table 9.

TABLE 9

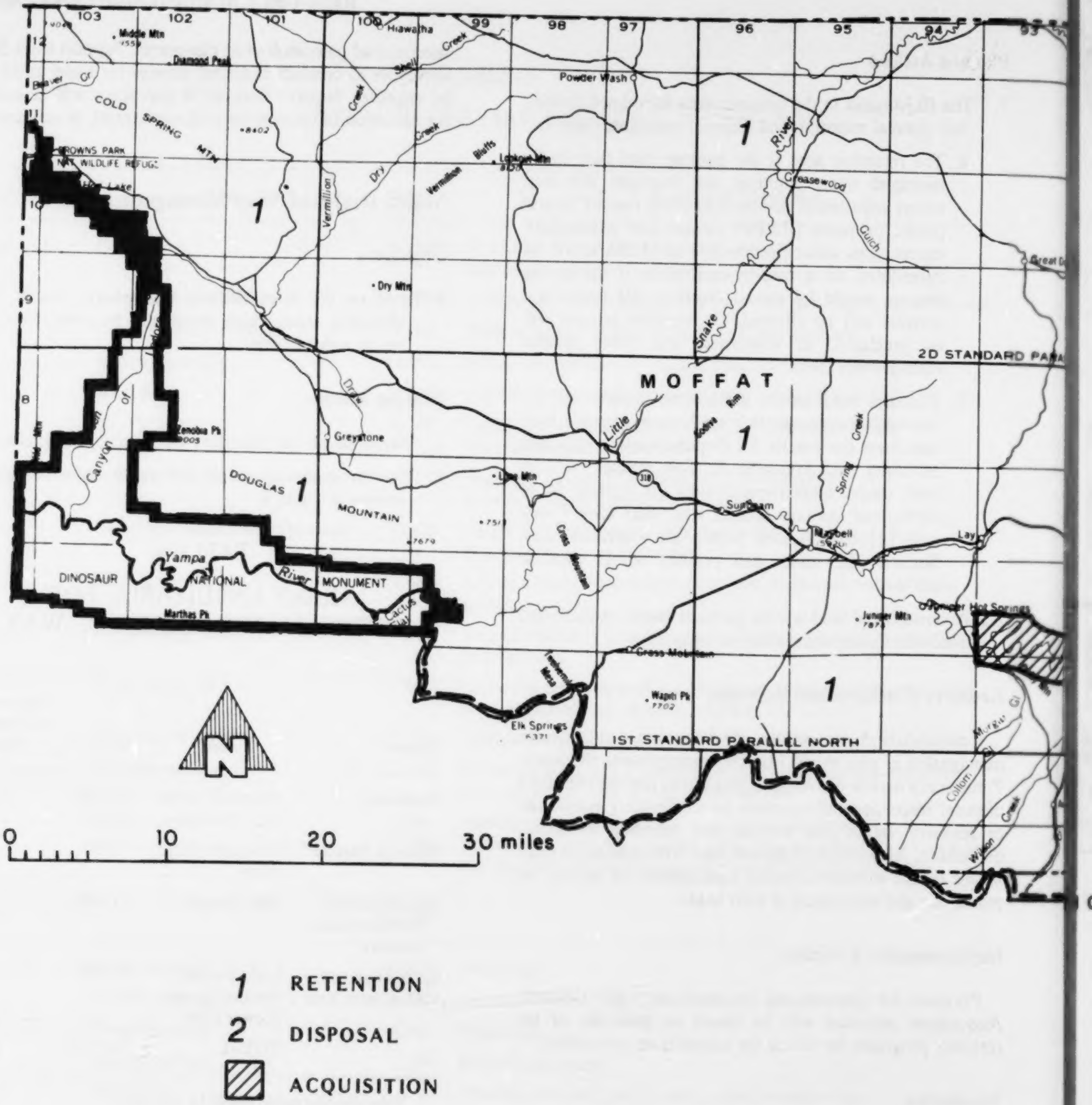
AREAS UNSUITABLE FOR SITING MAJOR RIGHTS-OF-WAY

Reason [1]	Area	Acreage	Percentage of Resource Area [2]
Wilderness	Diamond Breaks	36,240	3
	Cross Mountain	14,081	1
Research Natural	Limestone Ridge Areas	1,350	—
Area of Critical Environmental Concern	Irish Canyon	11,680	1
Special Recreation Management Area	Little Yampa/ Juniper Canyon (Lower Unit)	15,360	1
	TOTAL	78,711	6

[1] Valid existing rights would be respected.

[2] 1,300,000 acres

3. The existing and potential corridors identified as suitable in Table 10 and displayed on Map 4 are considered open and are preferred routes.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Middle Mtn
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Hiawatha
Powder Wash
Beaver Cr.
COLD SPRING MTN
BROWNS PARK NAT. WILDLIFE REFUGE
Vermillion Creek
Dry Creek
Vermillion Bluffs
Lookout Mtn
Shell Creek
Snake River
Greasewood Gulch
Dry Mtn
Great Divide
2D STANDARD PARALLEL
MOFFAT
Little Snake River
Sober Rim
Spring Creek
Zenobia Pk
Canyon of Lodore
Greystone
DOUGLAS MOUNTAIN
Lone Mtn
Cross Mountain
Sunbeam
Maybell
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DINOSAUR NATIONAL MONUMENT
Yampa River
Marthas Pk
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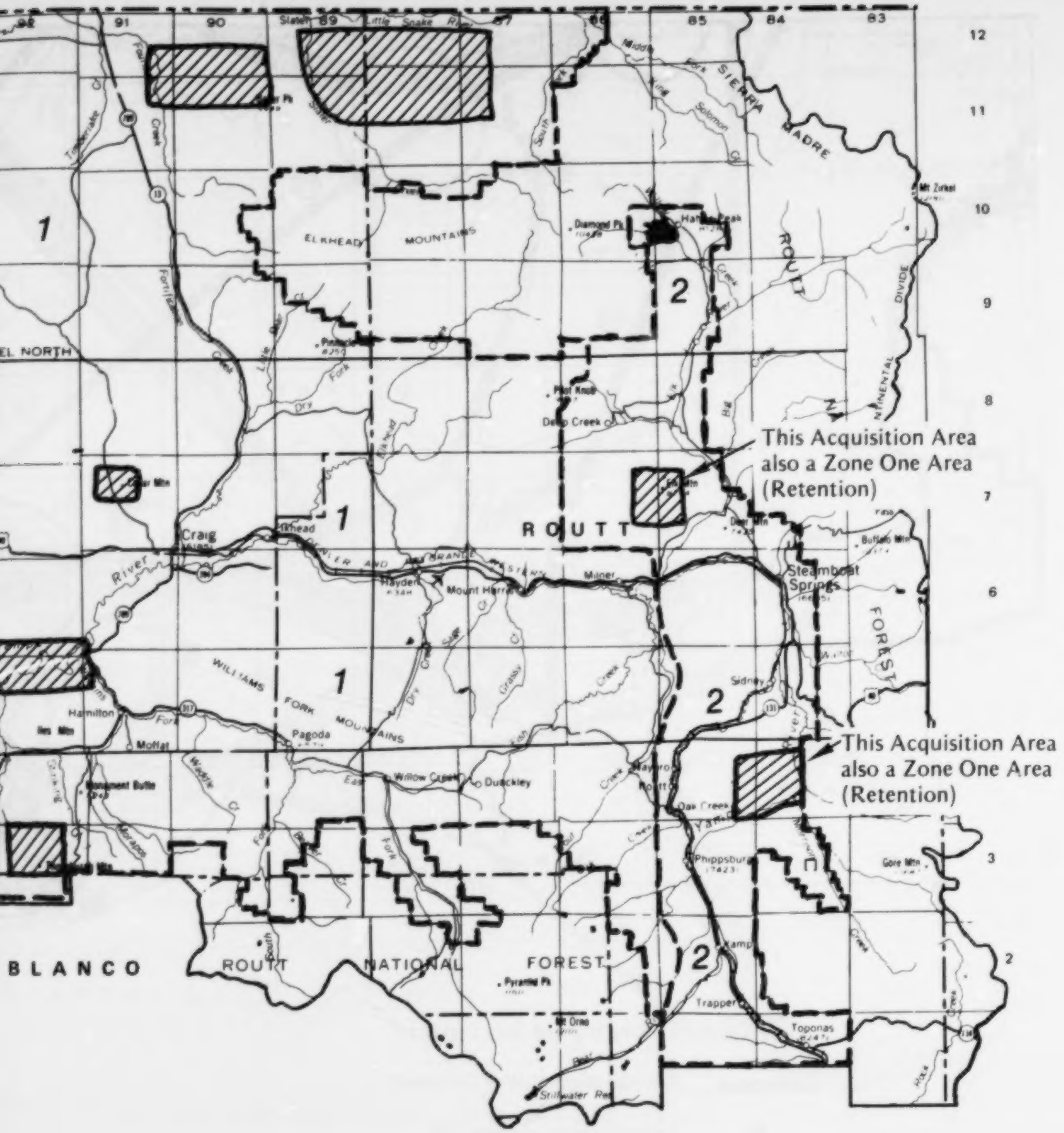
▨ ACQUISITION

Map 3. Retention and Disposal Areas


This Acquisition Area also a Zone One Area (Retention)

This Acquisition Area also a Zone One Area (Retention)

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Craig
Elkhead
ROUTT
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Buffalo Mtn
Steamboat Springs
FOREST
River
Hayden
Mount Harris
Milner
DENVER AND RIO GRANDE WESTERN
WILLIAMS FORK MOUNTAINS
Hamilton
Iles Mtn
Moffat
Pagoda
Sidney
Monument Butte
Willow Creek
Dunckley
Mayfield
Routt
Oak Creek
Yampa
Phippsburg
Gore Mtn
BLANCO
ROUTT NATIONAL FOREST
Pyramid Pk
Mt Oreo
Trapper
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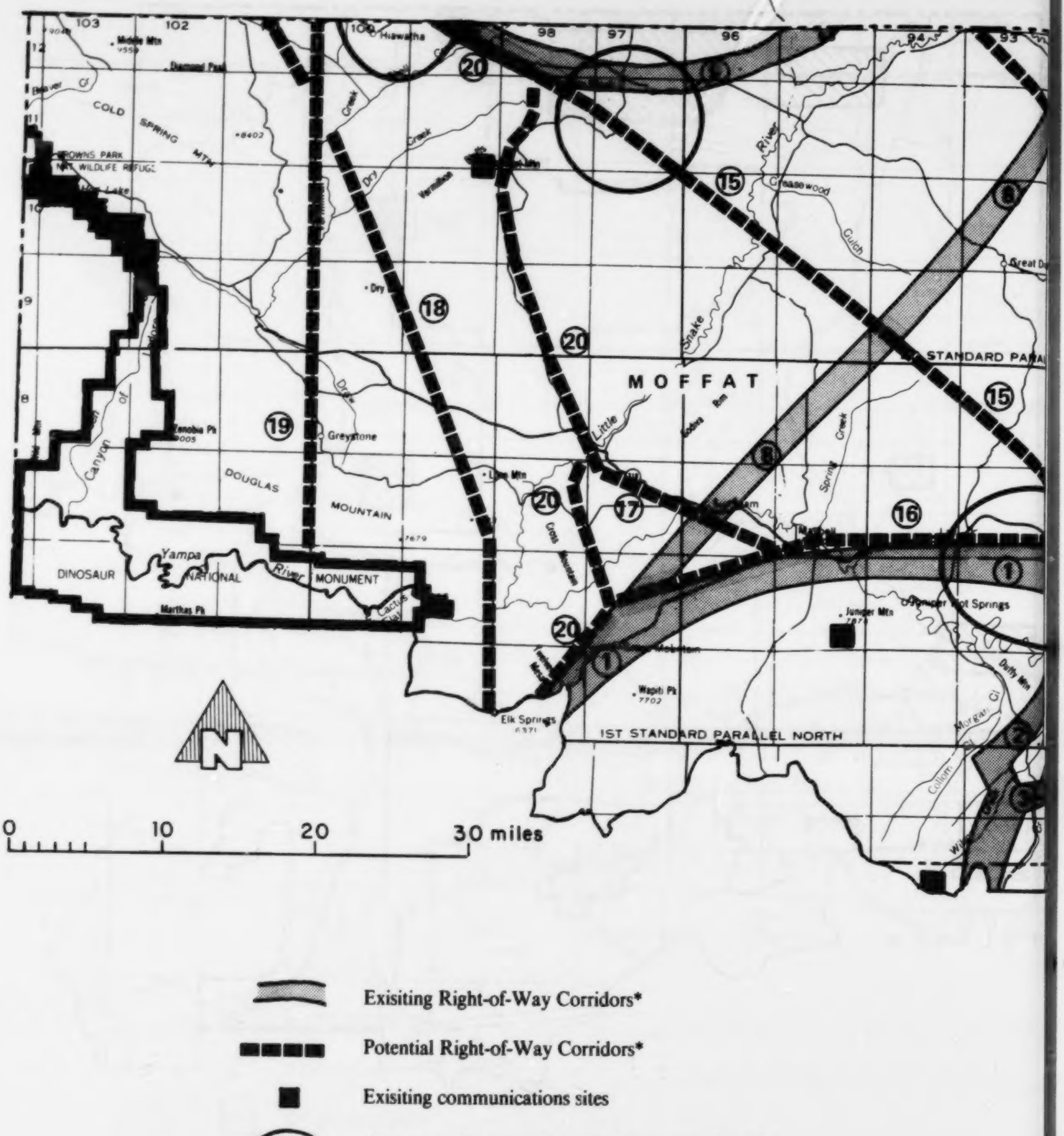
Stillwater Res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Hiawatha
Vermillion
Dry Creek
Snake River
Greasewood Gulch
Great Divide
STANDARD PARALLEL
MOFFAT
Little Snake River
Spring Creek
Zenobia Pk
Greystone
DOUGLAS MOUNTAIN
Canyon of Lodore
Yampa River
DINOSAUR NATIONAL MONUMENT
Marthas Pk
Cactus Flat
Cross Mountain
Lone Mtn
Juniper Mtn
Juniper Hot Springs
Wapiti Pk
Elk Springs
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▨ Exisiting Right-of-Way Corridors*

▬▬▬▬ Potential Right-of-Way Corridors*

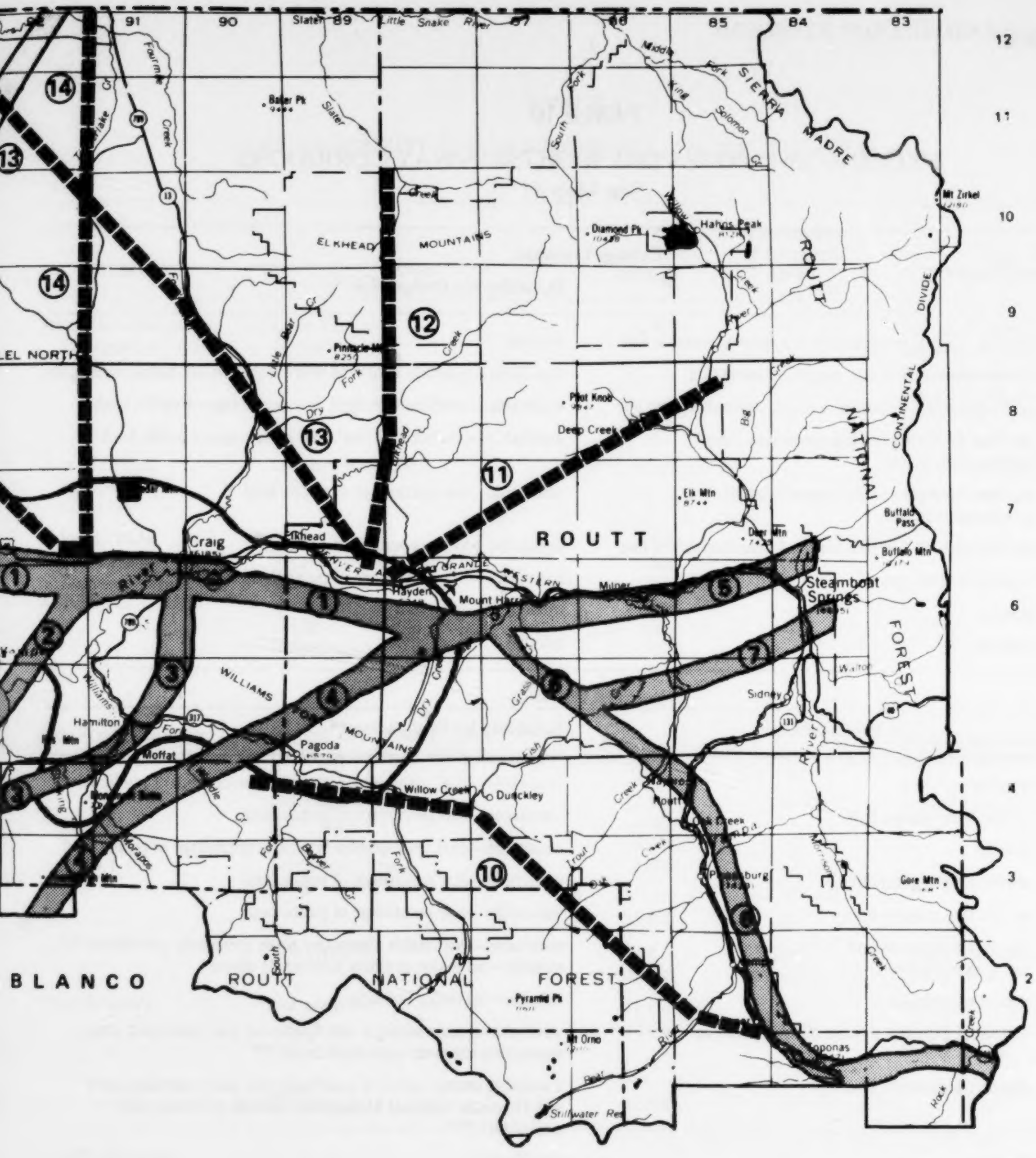
■ Exisiting communications sites

○ Area currently supporting a high concentration of minor linear rights-of-Way

*Identified in the 1980 Western Regional Corridor Study

17 See Tables 9, 10 and 11 for suitability discussion

Map 4. Major Rights-of-Way



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SIERRA MADRE
Baker Pk
Slater Creek
Fourmile Creek
South Fork
Middle Fork
King Solomon Cr
Mt Zirkel
Diamond Pk
Hahns Peak
ELKHEAD MOUNTAINS
ROUTT
CONTINENTAL DIVIDE
NATIONAL
FOREST
Pinnacle Mtn
Little Bear Cr
Fork
Dry Fork
Elkhead
Pilot Knob
Deep Creek
Elk Mtn
Deer Mtn
Buffalo Pass
Buffalo Mtn
LEL NORTH
Craig
Elkhead
DENVER AND RIO GRANDE WESTERN
Hayden
Mount Harris
Milner
Steamboat Springs
River
WILLIAMS FORK MOUNTAINS
Williams
Hamilton
Fork
Moffat
Pagoda
Dry Creek
Grassy Creek
Walton
Sidney
River
Willow Creek
Dunckley
Trout Creek
Oak Creek
Phippsburg
Morrison Creek
Gore Mtn
Morapos
South Fork
Beaver Cr
Fork
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ROUTT NATIONAL FOREST
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TABLE 10

EXISTING AND POTENTIAL RIGHTS-OF-WAY CORRIDORS
(See Map 4)

Existing Corridors

No.*	Use	Suitability for Designation **
1	pipeline, electric transmission line, communication line	suitable
2	electric transmission line, communication line	unsuitable—conflicts with coal, recreation, special management area
3	multiple electric transmission lines, communication line	unsuitable—conflicts with coal, low percentage of public land
4	pipeline, multiple electric transmission lines, communication line	unsuitable—conflict with coal, low percentage of public land
5	pipeline, multiple electric transmission lines, communication line	unsuitable—low percentage of public land
	electric transmission line, railroad, communication line	unsuitable—low percentage of public land
7	communication line	unsuitable—low percentage of public land
8	pipeline	suitable
9	pipeline	suitable

Potential Corridors

No. *	Proposed Use	Suitability for Designation **
10	pipeline	unsuitable—coal management area; low percentage of public land
11	electric transmission line	unsuitable—low percentage of public land
12	pipeline	unsuitable—coal management area; low percentage of public land
13	electric transmission line	unsuitable—low percentage of public land
14	electric transmission line	unsuitable—low percentage of public land
15	electric transmission line	unsuitable—reasonable alternative route previously established ***
16	coal slurry pipeline	suitable—no major conflicts, follows #1 above
17	coal slurry pipeline	suitable—no major conflicts
18	coal slurry pipeline, electric transmission line	unsuitable-crosses sensitive and fragile soil and watershed areas, reasonable alternate route estabilshed ***
19	electric transmission line	unsuitable crosses sensitive and fragile soil and watershed areas and Dinosaur National Monument, suitable alternate route established ***
20	Pipeline	suitable ***

* Numbers 1-7 and 9-19 are identified in the 1980 Western Regional Corridor Study.

** Suitablility only relates to whether or not a corridor would either be designated or identified as a preferred/encouraged route. The term "unsuitable" is not used to imply preclusion of new facilities, but rather to identify corridors which, under all alternatives, pass through an area containing important resource values. These "unsuitable" corridors would usually be sensitive to the placement of new facilities and would be subject to the special stipulations referred to under each of the alternatives; they would generally be addressed on a case-by-case basis. They may also be considered unsuitable if they cross little or no public surface ownership.

*** Sand Wash Alternative - see Rangely Carbon Dioxide pipeline Final Environmental Impact Statement, February 1985.

TABLE 11

AREAS SENSITIVE FOR SITING MAJOR RIGHTS-OF-WAY

Reason	Area	Acreage	Percentage of Resource Area [1]	Type of Restrictions [2]
Special Recreation Management Area	Little Yampa/ Juniper Canyon (Upper Unit)	4,480	—	No major rights-of-way unless associated with logical development of the Iles Mountain coal tract or compatible with objectives of SRMA
Area of Critical Environmental Concern	Lookout Mountain	6,500	—	Avoidance stipulations
Colorado BLM Sensitive Plants or Remnant Plant Associations	Horse Draw	690	—	Avoidance stipulations
	Vermillion Creek	200	—	
	Ace-in-the-Hole	260	—	
	Vermillion Bluffs	580	—	
	G Gap	275	—	
	Hells Canyon	280	—	
		2,285	—	
Soil/Water Resources	Portions of Vermillion Creek Drainage, and Sand Wash Drainage	38,840	3	Performance standards, seasonal restrictions, avoidance stipulations, soil stablization measures
	Buffalo Gulch/Twelvemile Mesa	4,000	—	
	Little Snake River	22,000	2	
	Sand Creek	2,000	—	
	Conway Draw	1,000	—	
	Deception Creek	1,000	—	
		68,840	5	
Coal	Not available	Not available	Not available	Avoidance of known surface mining areas
Other Minerals	Not available	Not available	Not available	Avoidance of known surface mining areas and known mining claims
	TOTAL	82,105	6	

[1] 1,300,000 acres

[2] Valid existing rights would be respected

4. Specific areas that are sensitive for siting major rights-of-way are shown in Table 11.
5. Minor rights-of-way will be processed on a case-by-case basis, generally guided by the criteria identified for major rights-of-way.
6. Rights-of-way will be allowed in all areas if needed to develop valid existing rights.

Resource Condition and Rationale

In the past, attempts to pre-select the best routes for rights-of-way and designate corridors have not been very successful. The approach used here is to identify areas unsuitable for, or sensitive to, siting of major rights-of-way and suitable existing and potential corridors. This allows those who need rights-of-way through the Little Snake Resource Area to design their proposed routes with a good indication of the chances for approval and the amount of mitigative measures that could be required.

Implementation Priorities

Priorities for major rights-of-way would be based on public demand.

Monitoring

Individual land-use authorizations will be monitored on a case-by-case basis to ensure compliance with planned actions and applied mitigation.

Support

Other resource specialists will assess impacts of proposed rights-of-way and identify mitigative measures, if needed. Cadastral survey will be needed to locate public land boundaries.

Access, Boundary Marking, and Road Requirements

An access/transportation plan will be prepared that lists areas needing attention, types of access to be acquired, preferred and alternate routes, roads and trails to be closed or constructed, survey and support needs, and construction or maintenance guidelines. This will be based on other resource program needs to meet their program objectives.

Management Units

This management unit section divides the resource area into 17 geographic areas. Each of the management units includes a narrative description of how resources will be managed and under what terms and conditions.

The resource area has been divided into geographical areas called management units. These management units were developed based on opportunities for managing the resource values and uses present to attain the best multiple-use prescriptions to provide maximum benefit to the general public. The following 17 management units are narratively described to display the location of each unit, the resource use or value of concern in each unit, the management objective of each unit, and management prescriptions of each unit. Table 12 lists each management unit and the acreage for each unit.

In many cases, management unit boundaries depicted on the resource management plan map have not been located on the ground (see map insert). Before specific project locations are decided, locations of the management unit boundaries will be determined based on the resource information that was used to place the boundary on the map. For example, a unit objective may be to protect critical winter range and the boundary might be based on a ridge line or a vegetation type. The actual location on-the-ground would be determined by the ridge line or vegetation type boundary.

The management units or other areas depicted on the map may include areas of split-estate (private surface over federal minerals), private, state, or other nonfederal lands. However, the management prescriptions apply only to BLM-managed surface and federal mineral estate. None of the management units apply to private, state, or other lands or minerals not managed by BLM. In addition, management prescriptions do not supersede valid existing rights. Nothing on the map or in this Little Snake Resource Management Plan should be interpreted as challenging those rights (see Valid Existing Rights section in the Introduction).

Management Unit 1: Eastern Yampa River - 938,000 Acres - 28.8 percent of Resource Area

Management Unit 1 is located in the eastern portion of the resource area. The federal lands within this unit are predominately subsurface estate, with private surface ownership. This unit contains the majority of the federal coal planning area to which the coal unsuitability criteria, 43 CFR 3461, have been applied (see appendices 1 and 2). In-place coal resources within the federal coal planning area for this resource management plan have been estimated to be approximately 6.1 billion tons within 3,000 feet of the land surface. This unit is also rated as possessing the highest favorability for the occurrence of oil and gas resources in the Little Snake Resource Area and contains significant known reserves of oil and gas.

TABLE 12

Management Units

MANAGEMENT UNIT	GROSS ACRES	PERCENT OF RESOURCE AREA
Eastern Yampa River M.U. 1	938,000	28.8
Northern Central M.U. 2	780,000	23.9
Little Snake River M.U. 3	670,000	20.7
Eastern Foothills M.U. 4	330,000	10.1
Douglas Mountain M.U. 5	100,500	3.1
Northern Great Divide M.U. 6	99,000	3.0
Scattered Sands M.U. 7	61,000	1.8
Axial Basin M.U. 8	54,000	1.7
Cold Spring M.U. 9	54,000	1.7
Proposed Wilderness Areas M.U. 10	50,320	1.5
Cross Mountain M.U. 10A*		
Diamond Breaks M.U. 10B		
Recreation Areas M.U. 11	41,720	1.3
Little Yampa/ Juniper Canyon M.U. 11A		
Cedar Mountain M.U. 11B		
Wild Mountain M.U. 11C		
Vermillion M.U. 12	26,430	0.8
ACECs M.U. 13	19,530	0.6
Limestone Ridge M.U. 13A		
Irish Canyon M.U. 13B		
Lookout Mountain M.U. 13C		
Cross Mountain Canyon M.U. 13D *		
Middle Mountain M.U. 14	16,500	0.5
Cross Mountain Foothills M.U. 15	9,000	0.3
West Red Wash M.U. 16	6,500	0.2
Willow Creek H.U. 17	1,000	0.1
	3,258,000	100.0

* Acreage for Cross Mountain ACEC included under Proposed Wilderness Areas

The management objectives of this unit are to realize the potential for development of coal, oil, and gas resources. Concurrent development of coal, oil, and gas could occur. Any conflicts arising from concurrent oil and gas and coal development would be settled by the affected operators. Approximately 638,800 acres are identified as acceptable for further consideration for federal coal leasing, with 457,100 acres acceptable for consideration for surface or underground mining and 181,700 acres for underground mining only. Other resource uses/values within this unit are allowed consistent with coal, oil, and gas resource development objectives. All resource uses are managed as described in the Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Other Minerals. Public lands are open to exploration and development of other leasable minerals and to location of mining claims. Development of other federal leasable minerals and federal materials sales will be allowed consistent with the management objectives for this unit.

Livestock Grazing. Public lands are open to livestock grazing unless coal development is imminent. Range management practices or projects will be permitted consistent with the management objectives for this unit.

Wildlife. Wildlife habitats, including threatened or endangered species habitats, will be protected by limits or restrictions placed on the development of federal coal, as the result of the application of the coal unsuitability criteria (see appendices 1 and 2). Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit.

Forest Lands and Woodlands. Public lands are open to harvesting of forest and woodland products consistent with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use consistent with the management objectives for this unit. Limited development of recreation sites will be allowed in areas proposed for underground mining. Recreation development can occur in other areas within this management unit consistent with the management objectives for this unit. The unit is open to off-road vehicle use.

Realty Actions. Realty actions such as rights-of-way, leases, and permits, can be allowed on public land consistent with the management objectives for this unit. Land tenure adjustments primarily through exchanges or the Recreation and Public Purposes Act can occur where the public interest will be best served.

Management Unit 2: Northern Central - 780,000 Acres - 23.9 percent of Resource Area

The majority of Management Unit 2 is located in the northern portion of the resource area with smaller portions located throughout the western half. The lands in this unit are both public lands, administered by the BLM, and private lands. Most of the public and private surface ownership is underlain by federal minerals. State lands are also scattered throughout the unit. Most of the public lands within this unit have been rated as having either highest or high intermediate favorability for the occurrence of oil and gas, with a small portion rated as having a low intermediate favorability. Scattered throughout this unit are small commercial stands of lodgepole or ponderosa pine sawtimber and poles.

The management objectives for this unit are to provide for the development of the oil and gas resource. Public surface lands with commercially valuable stands of ponderosa or lodgepole sawtimber or poles are managed for those forest values. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas and forest resources. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Other Minerals. Public lands are open to exploration and development of other leasable minerals and to location of mining claims. Development of other federal leasable minerals and federal materials sales will be allowed, consistent with the management objectives for this unit.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit.

Wild Horses. Habitat condition will be maintained to support a portion of the herd of 130 to 160 wild horses within the Sand Wash Basin and a monitoring program will be established to determine utilization. Wild horse projects and management practices will be designed to be compatible with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. The unit is open to off-road vehicle use.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur, consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 3: Little Snake River - 670,000 Acres - 20.7 percent of Resource Area

The majority of Management Unit 3 is located in the west central portion of the resource area with smaller portions located throughout. The majority of the lands in this unit are public lands administered by the BLM with scattered parcels of state and private lands. Public lands within this unit have the potential for enhanced livestock grazing by increased forage production through improvement of soil and water resource values.

The management objectives of this unit are to improve soil and watershed values, increase forage production, and enhance livestock grazing. Allotment management plans (AMPs), rangeland improvement projects, vegetative land treatments, and water quality and watershed activity plans will be developed to improve the vegetation, soil, and watershed resources and values. Other resource uses/values within this unit are allowed consistent with livestock grazing, forage production, soil, and watershed resource objectives. All resource uses are managed as described in the Management Actions Section of this document. Special stipulations, such as performance standards, will be added to permits, licenses, leases or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration. This management unit contains approximately 1,100 acres of the coal planning area. This acreage has had the coal unsuitability criteria, 43 CFR 3461 applied (see appendices 1 and 2). These 1,100 acres are identified as acceptable for further consideration for federal coal leasing for surface or underground mining.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are also open to locatable mineral exploration and development.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit. Other funded projects or treatments will be authorized if the proposed project or treatment would have a neutral or beneficial effect on the management objectives of the unit and the operator agrees to share benefits to meet objectives of the unit.

Wild Horses. Habitat condition will be maintained to support a portion of the herd of 130 to 160 wild horses within the Sand Wash Basin and a monitoring program will be established to determine utilization. Wild horse projects and management practices will be designed to be compatible with the management objectives for this unit.

Forest Lands and Woodlands. Public lands are open to harvesting of timber on forest lands and woodlands consistent with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. The unit is open to off-road vehicle use.

Realty Actions. Realty actions such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 4: Eastern Foothills - 330,500 Acres - 10.1 percent of Resource Area

The majority of Management Unit 4 is located on the eastern boundary of the resource area; several small portions of the unit are located along the eastern end of the southern boundary that borders Routt National Forest. The land ownership pattern consists of nearly all private surface lands interspersed with a few scattered parcels of public surface lands. The mineral ownership is mainly private with some state and federal mineral ownership scattered throughout. The favorability of this unit for the occurrence of oil and gas varies from a rating of "lowest" in the eastern portion of this unit to "highest" in the southwestern portion. This unit contains geothermal occurrences of undetermined significance. Commercial stands of lodgepole pine sawtimber and poles occur on some of the scattered public surface lands.

The management objectives for this unit are to provide for the development of oil, gas, and geothermal resources. Any conflicts arising from concurrent development of oil, gas, and geothermal resources will be settled by the affected operator. Public surface lands with commercially valuable stands of lodgepole sawtimber or poles will be managed for those forest values. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas, geothermal, and forest resources. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Other Minerals. Public lands are open to exploration and development of other leasable minerals and to location of mining claims. Development of other federal leasable minerals and federal materials sales is allowed, consistent with the management objectives for this unit.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use consistent with the management objectives for this unit. The unit is open to off road vehicle use.

Realty Actions. Realty actions such as rights-of-way, leases, and permits can be allowed consistent with the management objectives for this unit. Approximately 6,670 acres of this unit are classified for disposal (see Map 3). This disposal will be by sale or exchange.

Management Unit 5: Douglas Mountain - 100,500 Acres - 3.1 percent of Resource Area

The majority of Management Unit 5 is located on Douglas Mountain, north of Dinosaur National Monument in the southwest part of the resource area. Several small portions of the unit are also found in the southwest part of the resource area. The majority of the lands in this unit are public lands administered by the BLM. Parcels of state and private lands are intermingled with the public lands. This unit contains forest and woodland resources consisting of stands of ponderosa pine sawtimber and stands of posts, poles, and firewood in pinyon-juniper woodlands.

The management objectives for this unit are to manage the forest and woodland resources to produce a variety of forest and woodland products on a sustained-yield basis. The development of other resource uses/values within this unit is allowed consistent with the management objectives for forest and woodland resources. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to exploration and development of other leasable minerals and to location of mining claims. Development of other federal leasable minerals and federal materials sales is allowed, consistent with the management objectives for this unit.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

Wildlife. Public lands are available for wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with management objectives for this unit.

Wild Horses. Habitat condition will be maintained to support a portion of the herd of 130 to 160 wild horses within the Sand Wash Basin and a monitoring program will be established to determine utilization. Wild horse projects and management practices will be designed to be compatible with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. The unit is be open to off road vehicle use.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur, consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 6: Northern Great Divide - 99,000 Acres - 3.0 percent of Resource Area

Management Unit 6 is located in the northcentral part of the resource area along the Wyoming border. The majority of the lands in this unit are public lands administered by the BLM. Parcels of state and private lands are intermingled with the public lands. This area supports the largest population of sage grouse and includes the highest number of strutting grounds in the resource area. Associated with the strutting grounds are very important nesting and brood rearing areas. A significant feature of the high quality sage grouse habitat is the cover provided by sagebrush intermixed with meadows and open areas for strutting. It is important that essential cover remains unbroken around these strutting, nesting and brood rearing areas. This management unit is also extremely important for mule deer and pronghorn antelope since it contains considerable critical winter range for both species.

The management objectives for this management unit are to maintain and improve critical habitat for sage grouse, mule deer and pronghorn antelope. Wildlife habitat management plans (HMPs) and wildlife habitat improvement projects will be developed and implemented to achieve the management objectives for this unit. Other resource uses/values within this unit will be allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing. BLM-funded rangeland improvement projects or vegetation treatments, or livestock operator-funded projects or treatments will be authorized when compatible with the management objectives for this unit. Livestock operator-funded projects or treatments will be authorized if the proposed project or treatment would have a neutral or beneficial effect on the management objectives of the unit and the operator agrees to share benefits to meet objectives of the unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 7: Scattered Sands - 61,000 Acres - 1.8 percent of Resource Area

Management Unit 7 consists of small parcels scattered throughout the northern and western halves of the resource area. Land ownership patterns in these parcels consist of both public lands administered by the BLM and private surface ownership underlain by federal mineral ownership. State lands are interspersed throughout the unit. This unit consists of areas with mining claims and localities having potential for sand and gravel sales and development potential for leasable minerals other than coal, oil and gas, and geothermal resources.

The management objectives for this unit are to: 1) provide for the development of locatable minerals and leasable minerals other than coal, oil, gas, and geothermal resources, and 2) make areas available to supply demand for sand, gravel, and other salable mineral materials. The development of other resource uses/values within this unit is allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described on Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit.

Wild Horses. Habitat condition will be maintained to support a portion of the herd of 130 to 160 wild horses within the Sand Wash Basin and a monitoring program will be established to determine utilization. Wild horse projects and management practices will be designed to be compatible with the management objectives for this unit.

Forest Lands and Woodlands. Public lands are open to harvesting of timber on forest lands and woodlands consistent with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. The unit is open to off road vehicle use.

Realty Actions. Realty actions such as rights-of-way, leases, and permits can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 8: Axial Basin - 54,000 Acres - 1.7 percent of Resource Area

Management Unit 8 is located in the southcentral part of the resource area south of Iles and Duffy mountains. The majority of the surface lands in this unit are public lands administered by the BLM. The unit also contains some private lands and scattered state lands. This management unit contains critical winter range for mule deer and elk. These species are dependent upon stands of sagebrush, saltbush, and other shrubs for winter forage. There is also a major mule deer migration route and considerable deer fawning habitat in the unit. Sage grouse are common and several strutting grounds and brood rearing areas have been identified within this unit as well.

The management objectives for this unit are to maintain and improve critical habitats for mule deer, elk, and sage grouse. Wildlife habitat management plans (HMPs) and wildlife habitat improvement projects will be developed and implemented to achieve the management objectives for this unit. Other resource uses/values within this unit are allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit. The majority of this management unit lies within the coal planning area. The coal unsuitability criteria, 43CFR 3461, have been applied. While some areas are acceptable for further consideration only for underground mining, the majority of the unit is acceptable for further consideration for surface or underground mining (see Appendix 2). Further consideration will include consistency with the management objectives of this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing. BLM-funded rangeland improvement projects or vegetation treatments, or livestock operator-funded projects or treatments will be authorized when compatible with the management objectives for this unit. Livestock operator-funded projects or treatments will be authorized if the proposed project or treatment would have a neutral or beneficial effect on the management objectives of the unit and the operator agrees to share benefits to meet objectives of the unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails.

Realty Actions. Realty actions such as rights-of-way, leases, and permits can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest would be best served.

Management Unit 9: Cold Spring - 54,000 Acres - 1.7 percent of Resource Area

Management Unit 9 is located in the northwest corner of the resource area. The west end of the unit borders Utah. The majority of the lands in this unit are public lands administered by the BLM. Scattered parcels of state and private lands are also found within this unit. This unit supports a highly diverse ecosystem in a relatively undisturbed state. Elk, mule deer, bighorn sheep, and raptors exist in significant numbers with little disturbance from development activities. The bighorn sheep were introduced in 1983 and require protection from disturbance to maintain a viable population. Beaver Creek is one of the few natural trout fisheries in the resource area and must remain relatively undisturbed in order to maintain its present quality. The area supplies excellent habitat for a tristate elk herd. Cold Spring Mountain also offers a wide variety of recreational opportunities. Activities include hunting, camping, hiking, backpacking, fishing in Beaver Creek, off-road vehicle use, wildlife viewing, and sightseeing. The Colorado Division of Wildlife has designated much of the area as a quality elk management area where elk hunting is allowed by limited license.

The management objectives for this unit are to maintain and improve the quality of 1) the habitat for elk, mule deer, bighorn sheep, 2) the fisheries in Beaver Creek, and 3) the recreational opportunities which exist here, primarily for hunting use. Wildlife habitat management plans (HMPs) and wildlife habitat improvement projects will be developed and implemented to achieve the management objectives for this unit. The unit is managed under VRM Class II objectives to maintain scenic quality. Other resource uses/values within this unit are allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing. BLM-funded rangeland improvement projects or vegetation treatments, or livestock operator-funded projects or treatments will be authorized when compatible with the management objectives for this unit. Livestock operator-funded projects or treatments will be authorized if the proposed project or treatment would have an neutral or beneficial effect on the management objectives of the unit and the operator agrees to share benefits to meet objectives of the unit.

Forest Lands and Woodlands. Public lands are open to harvesting of forest products on forest lands and woodlands consistent with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails. The Matt Trail is closed to vehicle use for safety.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 10: Proposed Wilderness Areas - 50,320 Acres - 1.5 percent of Resource Area

Management Unit 10A: Cross Mountain Wilderness Study Area (WSA)

Management Unit 10A is located in the southwest portion of the resource area, east of Dinosaur National Monument, and contains 14,081 acres. All lands in this unit are public lands administered by the BLM. The unit possesses outstanding wilderness characteristics. The unit offers outstanding opportunities for solitude and primitive and unconfined recreation primarily in and north of Cross Mountain Canyon. Cross Mountain Canyon has sheer vertical walls and is of geologic and scenic interest. Bighorn sheep and threatened and endangered fish are present. Peregrine and prairie falcons may also be present. The unit also has a high geological potential for the occurrence of oil and gas but insufficient data currently exists to determine whether or not oil and gas resources actually are present.

This management unit (including the proposed Cross Mountain Canyon ACEC) is recommended as preliminarly suitable for wilderness designation. BLM would recommend that the proposed Cross Mountain wilderness remain open to oil and gas leasing with no-surface-occupancy stipulations (except for Cross Mountain Canyon ACEC which would be proposed for total mineral withdrawal). If Congress does not designate Cross Mountain as wilderness, the area would be managed as a special recreation management area (13,000 acres), along with the Cross Mountain Canyon ACEC (3,000 acres). (See the Draft RMP/EIS Wilderness Technical Supplement, Cross Mountain Preferred Alternative, for more details.)

The BLM will undertake no actions nor permit any activities which could adversely affect or impact any outstandingly remarkable values of the Yampa River segment in Cross Mountain which is listed in the Nationwide Rivers Inventory List which makes it eligible for inclusion in the National Wild and Scenic River System. Free-flowing characteristics of identified river segments cannot be modified, to the extent the BLM is authorized under law to control stream impoundments, diversions, or other development.

The BLM will schedule an amendment to the Little Snake RMP, as soon as funding permits, which would provide an appropriate suitability recommendation on potential designation of the river segments for inclusion in the WSR System.

Management Unit 10B: Diamond Breaks WSA

Management Unit 10B is located on the western border of the resource area with a small portion extending into Utah. The unit contains 32,620 acres in Colorado and 3,620 acres in Utah. All lands in this unit are public lands administered by the BLM. The unit possesses outstanding wilderness characteristics. The unit offers outstanding opportunities for solitude and primitive and unconfined recreation. The unit has a unique combination of vegetation and topography.

This management unit is recommended as preliminarily suitable for wilderness designation. If Congress does not designate Diamond Breaks as wilderness, the Colorado portion of the unit would be managed for its recreation opportunities as part of the Extensive Recreation Management Area; the Utah portion (3,620 acres) would be managed by the Vernal District according to existing management framework plans. (See the Draft RMP/EIS Wilderness Technical Supplement, Diamond Breaks No Wilderness Alternative for more detailed discussion.)

Proposed Wilderness Areas Management

Both units 10A and 10B will continue to be managed in compliance with BLM's Interim Wilderness Management Policy (BLM, Revised November 10, 1987) until they are reviewed and acted upon by Congress.

If one or both units are designated as wilderness by Congress, the unit(s) would be managed in compliance with BLM's Wilderness Management Policy and the Wilderness Act of 1964. Site specific wilderness management plans would be developed for such areas after designation by Congress. In general, wilderness areas would be devoted to recreational, scenic, scientific, educational, conservation, and historical values.

Section 4(c) of the Wilderness Act prohibits certain activities:

> Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness areas designated by this Act and, except as necessary to meet minimum requirements for the administration of the area for the purpose of the Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

Exceptions. Sections 4(c), and 4(d), and 5 of the Wilderness Act provide special exceptions to the prohibitions in Section 4(c) by providing for the following:

1. Existing private rights.
2. Measures required in emergencies involving the health and safety of persons within the area.
3. Activities and structures that are the minimum necessary for the administration of the area as wilderness.
4. Use of aircraft and motorboats, where already established.
5. Measures necessary for the control of fire, insects, and diseases.
6. Any activity, including prospecting, for the purpose of gathering information about mineral or other resources, if carried out in a manner compatible with the preservation of the wilderness environment. (This includes mineral surveys conducted on a planned, recurring basis by the U.S. Geological Survey and Bureau of Mines.)
7. Water resource developments authorized by the President, where it is determined that such use will better serve the interests of the United States than will its denial.
8. Livestock grazing, where already established.
9. Commercial services necessary for activities that are proper for realizing the recreational or other wilderness purposes of the areas.
10. Adequate access to surrounded state-owned and privately-owned lands. If this cannot be provided, such lands are to be exchanged for federally-owned lands.
11. Ingress and egress to surrounded valid mining claims and other valid occupancies.

In addition to the basic management authority in the Wilderness Act, management provisions may appear in the legislation establishing each wilderness area. Specific policy guidance on wilderness management is contained in the BLM publication, Wilderness Management Policy, September 1981.

Management Unit 11: Recreation Areas - 41,720 Acres - 1.3 percent of Resource Area

Management Unit 11A: Little Yampa/Juniper Canyon

Management Unit 11A is located in the south central part of the resource area along the Yampa River and encompasses 19,840 acres. The majority of the lands in this unit are public lands administered by BLM interspersed with scattered parcels of private lands. The unit provides flatwater river floatboating opportunities in a natural scenic setting which is limited within the region. The unit also provides camping, fishing, and hunting opportunities. A railroad spur is located within Little Yampa Canyon from the east end to Milk Creek.

Management Unit 11A is managed as a special recreation management area (SRMA). An SRMA is an area where significant recreation issues and management concerns exist for which special or more intensive management may be required. The SRMA is managed to provide unrestricted flatwater river floatboating in the region. The SRMA is also managed to meet Visual Resource Management Class II objectives. The SRMA is divided into upper (4,480 acres) and lower (15,360 acres) units. Periodic patrols will be conducted. Access will be negotiated for parking areas and put-in and take-out points. Other facilities will be constructed as needed for public sanitation and safety. A map/brochure will be developed to promote visitor health and safety, provide resource protection, and inform the public of available opportunities. Signs will be provided for information, direction, and interpretation. All concerns will be addressed in the Little Yampa/Juniper Canyon Recreation Area Management Plan. Other resource uses/values within this unit are allowed consistent with the management objectives for the SRMA. All resource uses are managed as described in the preceeding Management Actions Section. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

The BLM will undertake no actions nor permit any activities which could adversely affect or impact any outstandingly remarkable values of the Yampa River segments listed in the Nationwide Rivers Inventory List which make them eligible for inclusion in the National Wild and Scenic River System. Free-flowing characteristics of the identified river segments cannot be modified, to the extent the BLM is authorized under law to control stream impoundments, diversions, or other development.

The BLM will schedule an amendment to the Little Snake RMP, as soon as funding permits, which would provide an appropriate suitability recommendation on potential designation of the river segments for inclusion in the WSR System.

Coal. The majority of this management unit lies within the coal planning area. The coal unsuitability criteria, 43 CFR 3461, have been applied (see Appendix 2). The SRMA is acceptable for further consideration only for underground mining, with a no-surface-occupancy stipulation.

Oil and Gas. Public lands are open to oil and gas leasing and development, with a no-surface-occupancy stipulation on any new federal leases.

Other Minerals. Public lands are open to leasing of federal minerals, with a no surface occupancy stipulation. Mineral material sales are not allowed. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing, except within developed or intensively used recreation sites. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for the SRMA.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit.

Woodlands. Woodcutting is not allowed.

Vehicle Use. Vehicle use is limited to designated roads and trails, except as associated with valid existing rights.

Realty Actions. Ownership adjustments will be allowed where they would help achieve the SRMA management objectives. Management of the Upper Little Yampa Canyon unit 1) honors all valid existing rights, 2) allows for necessary maintenance of existing facilities even if such maintenance was outside the existing rights-of-way, and 3) allows for processing of new public land rights-of-way, if associated with development of the nearby Iles Mountain Coal Lease Tract or consistent with the management objectives of the unit. Rights-of-way will be allowed in either unit if associated with valid existing rights or permitted uses. Other rights-of-way will be allowed in either the upper or lower units if they can be designed to be consistent with the management objectives of the SRMA. This is expected to preclude development of major rights-of-way in the SRMA not associated with valid existing rights or development of the Iles Mountain Coal Lease Tract.

Management Unit 11B: Cedar Mountain

Management Unit 11B is located in the east central part of the resource area, northwest of Craig. The unit encompasses 880 acres, all of which is public land administered by the BLM. The unit covers most of Cedar Mountain which rises 1,000 feet above the Yampa Valley. Located only six miles from Craig, the mountain offers locally significant recreation opportunities more commonly found at much greater distances from Craig. The mountain receives considerable year-round use for hiking, sightseeing, target shooting, hunting, cross country skiing, and snowmobiling in rural and roaded natural types of settings. The predominate feature is the scenic overlooks, which provide a panoramic view of the Yampa Valley to the south and west and the Rocky Mountains to the east. Opportunities for environmental education in the area are noteworthy, based on the variety of vegetation, geology, and wildlife and the proximity to Craig. Several communication towers, small buildings, and powerlines occupy the high points, which detract somewhat from the overall naturalness exhibited by the area. BLM has leased a small area along Moffat County Road 7 to a private gun club for a developed shooting range.

Many nonresident and resident hunters utilize the area each year.

Management Unit 11B is managed as part of the extensive recreation management area for environmental education, hiking, and viewing. Trails and signs will be provided for information and interpretation. Leasing of the shooting range site will continue, with stipulations for sanitation, visual design, and safety. Other resource uses/values within this unit are allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. The management unit lies within the coal planning area. The coal unsuitability criteria, 43 CFR 3461, have been applied (see Appendix 2). The unit is acceptable for further consideration only for underground mining, with a no-surface-occupancy stipulation.

Oil and Gas. Public lands are open to oil and gas leasing and development, with a no-surface-occupancy stipulation on any new federal leases.

Other Minerals. Public lands are open to leasing of federal minerals, with a no-surface-occupancy stipulation. Mineral material sales would not be allowed. Lands would also remain open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing except within developed or intensively used recreation sites. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit.

Woodlands. Woodcutting is not allowed.

Vehicle Use. Vehicle use is limited to designated roads and trails, except as associated with valid existing rights.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 11C: Wild Mountain

Management Unit 11C is located on the west end of the resource area between the Utah border and Dinosaur National Monument and encompasses approximately 21,000 acres. The majority of the lands in this unit are public lands administered by the BLM with some private lands located mainly in the valleys. A variety of recreational settings, opportunities, and experiences are available in this unit, particularly for hunting.

Management Unit 11C is managed as part of the extensive recreation management area, primarily for hunting use. The area is managed under VRM class II objectives to maintain scenic quality. Other resource uses/values within this unit are allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development, consistent with the management objectives for this unit.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for this unit.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with management objectives for this unit.

Forest Lands and Woodlands. Public lands are open to harvesting of timber on forest lands and woodlands consistent with management objectives for this unit.

Vehicle Use. Vehicle use is limited to designated roads and trails, except as associated with valid existing rights.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 12: Vermillion - 26,430 Acres - 0.8 percent of Resource Area

Management Unit 12 is located in the northwestern portion of the resource area. The majority of the lands in this unit are public lands administered by the BLM with scattered parcels of state and private lands. The soils in this unit are very "fragile" and are extremely susceptible to wind and water erosion because of steepness, shallowness, fine texture, and in some areas, high salt concentrations resulting in sparse vegetative cover. The uses of these soils are greatly limited by the severe erosion hazards. Landsliding and other erosive phenomena may undercut structures, hinder construction, destroy road beds, and even pose safety hazards. Other factors, such as high summer temperatures, low precipitation, and high evapotranspiration rates, which are typical of the western portion of the resource area, limit the soil for uses associated with forage production and agricultural development.

The management objectives for this management unit are to prevent any increases in erosion and/or sediment yield. All resource uses are managed as described in the preceeding Management Actions Section providing they meet the performance standards described under Item 2, Soil and Water Resources, also in the preceding section. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration subject to the performance standards.

Oil and Gas. Public lands are open to oil and gas leasing and development subject to the performance standards.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales subject to the performance standards. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained subject to the performance standards.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects and new projects will be subject to the performance standards.

Wild Horses. Habitat condition will be maintained to support a portion of the herd of 130 to 160 wild horses within the Sand Wash Basin and a monitoring program will be established to determine utilization. Wild horse projects and management practices will be subject to the performance standards.

Recreation. Public lands are available for dispersed recreation use consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur subject to the performance standards. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 13: Areas of Critical Environmental Concern (ACECs) - 22,530 Acres - 0.7 percent of Resource Area

Management Unit 13A: Limestone Ridge ACEC

Management Unit 13A is located in the northwest portion of the resource area, just west and north of Irish Canyon, and encompasses 1,350 acres. All lands in this unit are public lands administered by the BLM. There are five remnant plant associations and one Colorado BLM sensitive plant species found in this unit. Limestone Ridge is also critical winter range for elk and has been identified as an elk concentration area. It has high visual and scenic qualities and is a prominent landmark in northwest Colorado. Views from the top include most of northwest Colorado, northeastern Utah, and southern Wyoming.

The management objectives of this unit are to protect or enhance remnant plant associations, Colorado BLM sensitive plant species, and scenic quality. The unit is designated as an ACEC/research natural area (RNA). Other resource uses/values within this unit are allowed consistent with the management objectives for the ACEC/RNA. All resource uses are managed as described in the preceeding Management Actions Section. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Coal exploration is not allowed.

Oil and Gas. Public lands are open to oil and gas leasing with no-surface-occupancy stipulations on new federal leases. Avoidance stipulations to protect the specific values of the ACEC/RNA will be placed on applications for permits to drill for existing federal leases, consistent with lease rights granted. The avoidance stipulation, when applied, would incorporate wording to the effect that "the habitat of known populations of Colorado BLM sensitive plants, remnant plant associations specifically identified, and scenic values will be protected from human induced activities to the extent such mitigation of impacts to these resources does not preclude the exercise of valid existing rights." For Colorado BLM sensitive plants, the area of protection will include the actual location of the population and, if present, adjacent critical sites that affect their habitat.

Other Minerals. Public lands are open to locatable mineral entry. Where necessary and allowed by law, avoidance stipulations will be placed on development of locatable minerals and leasable minerals under existing leases (see Oil and Gas above). No-surface-occupancy stipulations will be placed on new federal leases. Mineral material sales are not allowed.

Livestock Grazing. Public lands are open to livestock grazing and management practices consistent with the management objectives for the ACEC/RNA. Range improvement projects or treatments are not permitted.

Wildlife. Public lands are open to wildlife habitat management and wildlife habitat will be protected consistent with the management objectives for the ACEC/RNA. No wildlife habitat development projects or treatments are allowed.

Woodlands. Woodcutting is not allowed.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for the ACEC/RNA. The unit is closed to vehicle use.

Realty Actions. Realty actions, such as rights-of-way, are excluded unless associated with valid existing rights. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 13B: Irish Canyon ACEC

Management Unit 13B is located in the northwest portion of the resource area and encompasses 11,680 acres. The majority of the lands in this unit are public lands administered by the BLM with scattered parcels of state lands. The Irish Canyon area is one of the major landmarks in northwest Colorado and exhibits the most complete record of geologic history in the eastern Uinta Mountains. Good condition examples of three remnant plant associations, as well as Colorado BLM sensitive plant species, occur within the unit. Irish Canyon is the center for significant archaeological history in the northwest Colorado tristate region. The area encompasses some of the most notable rock art in western Colorado. The scenery of the area is spectacular. A short hike can provide the visitor with superb views of the natural environment. The area is being increasingly used by recreationists for sightseeing, hiking, camping, picnicking, and other activities.

The management objectives of this unit are to protect or enhance the remnant plant associations. Colorado BLM sensitive plant species, geologic values, cultural resources, and scenic quality. The unit is designated as an ACEC. Other resource uses/values within this unit are allowed consistent with the management objectives for the ACEC. All resource uses are managed as described in the preceeding Management Actions Section. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for the ACEC.

Oil and Gas. Public lands are open to oil and gas leasing with avoidance stipulations to protect Colorado BLM sensitive plants. Avoidance stipulations to protect the specific values of the ACEC will be placed on applications for permit to drill for new or existing federal leases consistent with lease rights granted. The avoidance stipulation, when applied, will incorporate wording to the effect that "the habitat of known populations of Colorado BLM sensitive plants, remnant plant associations specifically identified, geologic values, cultural resources, and scenic values will be protected from human induced activities to the extent such mitigation of impacts of these resources does not preclude the exercise of valid existing rights." For Colorado BLM sensitive plants, the area of protection will include the actual location of the population and, if present, adjacent critical sites that affect their habitat.

Other Minerals. Public lands are open to locatable mineral entry. Where necessary and allowed by law, avoidance stipulations would be placed on development of locatable, saleable, and leasable minerals under existing leases (see Oil and Gas above). No-surface-occupancy stipulations will be placed on new federal leases.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for the ACEC.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for the ACEC.

Woodlands. Woodcutting is not allowed.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for the ACEC. Vehicle use in this unit is limited to designated roads and trails.

Realty Actions. Realty actions, such as rights-of-way, are excluded unless associated with valid existing rights. Land tenure adjustments, primarily through exchanges or the

Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 13C: Lookout Mountain ACEC

Management Unit 13C is located in the northwest portion of the resource area, north of the Sand Wash Basin, and encompasses 6,500 acres. All lands in this unit are public lands administered by the BLM. There are two remnant plant associations and four Colorado BLM sensitive plant species found in this unit. Lookout Mountain is a prominent landmark with steep slopes and cliffs overlooking much of northwestern Colorado and south central Wyoming.

The management objectives of this unit are to protect or enhance remnant plant associations, Colorado BLM sensitive plant species, and scenic qualities. The unit is designated as an ACEC. Other resource uses/values within this unit are allowed consistent with the management objectives for the ACEC. All resource uses are managed as described in the preceeding Management Actions Section. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for the ACEC.

Oil and Gas. Public lands are open to oil and gas leasing with avoidance stipulations to protect Colorado BLM sensitive plants. Avoidance stipulations to protect the specific values of the ACEC will be placed on applications for permits to drill for new or existing federal leases, consistent with lease rights granted. The avoidance stipulation, when applied, will incorporate wording to the effect that "the habitat of known populations of Colorado BLM sensitive plants, remnant plant associations specifically identified, and scenic values will be protected from human induced activities to the extent such mitigation of impacts to these resources does not preclude the exercise of valid existing rights." For Colorado BLM sensitive plants, the area of protection will include the actual location of the population and, if present, adjacent critical sites that affect their habitat.

Other Minerals. Public lands are open to locatable mineral entry. Where necessary and allowed by law, avoidance stipulations will be placed on development of locatable, saleable, and leasable minerals under existing leases (see Oil and Gas above). No-surface-occupancy stipulations will be placed on new federal leases.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for the ACEC.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for the ACEC.

Wild Horses. Habitat condition will be maintained to support a portion of the herd of 130 to 160 wild horses within the Sand Wash Basin and a monitoring program will be established to determine utilization. Wild horse projects and management practices will be designed to be compatible with the management objectives for the ACEC.

Woodlands. Woodcutting is not allowed.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for the ACEC. Vehicle use in this unit is limited to designated roads and trails.

Realty Actions. Realty actions, such as rights-of-way, are excluded unless associated with valid existing rights. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 13D: Cross Mountain Canyon ACEC

Management Unit 13D is located in the southwest portion of the resource area, along the Yampa River east of Dinosaur National Monument, and encompasses 3,000 acres. All lands in this unit are public lands administered by the BLM. Two Colorado BLM sensitive plant species are found in this unit. The Cross Mountain Canyon area harbors three federally-listed endangered species, the Colorado squawfish, humpback chub, and peregrine falcon, and one state-listed threatened species, the razorback sucker. The Yampa River is on the National Park Service's Nationwide Rivers Inventory List which means that this section of the river has been inventoried and may be eligible for inclusion in the National Wild and Scenic River System. The area is habitat for bighorn sheep, elk, and mule deer. Cross Mountain Canyon exhibits steep rock cliffs which tower above the raging Yampa River. It is of high visual and scenic quality and is a favorite recreation spot for outdoor enthusiasts.

The management objectives of this unit are to enhance or protect Colorado BLM sensitive plant species, threatened and endangered species, and scenic quality. The unit is designated as an ACEC. Cross Mountain Canyon ACEC will be recommended for a total withdrawal from mineral entry and new federal oil and gas leasing will not be allowed if withdrawn. If a withdrawal were not obtained from the Secretary of the Interior, minerals would be handled as described below. Other uses/values within this unit are allowed consistent with the management objectives for the

ACEC. All resource uses are managed as described in the preceeding Management Actions Section. Special stipulations, such restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

The BLM will undertake no actions nor permit any activities which could adversely affect or impact any outstandingly remarkable values of the Yampa River segment in Cross Mountain which is listed in the Nationwide Rivers Inventory List which makes it eligible for inclusion in the National Wild and Scenic River System. Free-flowing characteristics of identified river segments cannot be modified, to the extent the BLM is authorized under law to control stream impoundments, diversions, or other development.

The BLM will schedule an amendment to the Little Snake RMP, as soon as funding permits, which would provide an appropriate suitability recommendation on potential designation of the river segments for inclusion in the WSR System.

Coal. Coal exploration is not allowed.

Oil and Gas. Public lands are open to oil and gas leasing with no-surface-occupancy stipulations on new federal leases if not withdrawn. Avoidance stipulations to protect the specific values of the ACEC will be placed on applications for permits to drill for existing federal leases consistent with lease rights granted. The avoidance stipulation, when applied, will incorporate wording to the effect that "the habitat of known populations of Colorado BLM sensitive plants, remnant plant associations specifically identified, and scenic values (VRM Class I) will be protected from human induced activities to the extent such mitigation of impacts to these resources does not preclude the exercise of valid existing rights." For Colorado BLM sensitive plants, the area of protection will include the actual location of the population and, if present, adjacent critical sites that affect their habitat.

Other Minerals. Public lands are open to locatable mineral entry. Where necessary and allowed by law, avoidance stipulations will be placed on development of locatable minerals and leasable minerals under existing leases (see Oil and Gas above). No-surface-occupancy stipulations will be placed on new federal leases. Mineral material sales are not allowed.

Livestock Grazing. Public lands are open to livestock grazing. Management practices or range improvement projects will be permitted and existing range improvements will be maintained consistent with the management objectives for the ACEC.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for the ACEC.

Woodlands. Woodcutting is not allowed.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for the ACEC. The unit is closed to vehicle use.

Realty Actions. Realty actions, such as rights-of-way, are excluded unless associated with valid existing rights. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 14: Middle Mountain - 16,500 Acres - 0.5 percent of Resource Area

Management Unit 14 is located in the northwest corner of the resource area and borders on Wyoming. The majority of the lands in this unit are public lands administered by the BLM. Parcels of state and private lands are intermingled with the public lands. This management unit supports a highly diverse ecosystem in a relatively undisturbed stage. Elk, mule deer, bighorn sheep, and raptors exist in significant numbers with little disturbance from human activity. The area supplies excellent habitat for a tristate elk herd that is managed by the Colorado Division of Wildlife for hunting.

The management objectives for this unit are to maintain and improve the quality of the habitat for the elk herd, mule deer, and raptors. Wildlife habitat management plans (HMPs) and wildlife habitat improvement projects will be developed and implemented to achieve the management objectives for this unit. Other resource uses/values within this unit are allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands open to livestock grazing. BLM funded rangeland improvement projects or vegetation treatments, or livestock operator-funded projects or treatments will be authorized when compatible with the management objectives for this unit. Livestock operator-funded projects or treatments will be authorized if the proposed project or treatment would have a neutral or beneficial effect on the management objectives of the unit and the operator agrees to share benefits to meet objectives of the unit.

Forest Lands and Woodlands. Public lands are open to harvesting of forest products on forest lands and woodlands consistent with the management objectives for this unit.

Recreation. Public lands are available to dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 15: Cross Mountain Foothills - 9,000 Acres - 0.3 percent of Resource Area

Management Unit 15 is located in the southwest portion of the resource area, east of Dinosaur National Monument. The majority of the lands in this unit are public lands administered by the BLM. Scattered parcels of state and private lands are also found in this unit. This management unit, in conjunction with the contiguous Cross Mountain WSA, contains a herd of bighorn sheep that were introduced January 28, 1977. Bighorn sheep require protection from disturbance to maintain a viable population. This unit is also used by elk and contains critical winter range for mule deer.

The management objectives for this unit are to maintain and improve the quality of the habitat for bighorn sheep, elk, and mule deer. Wildlife habitat management plans (HMPs) and wildlife habitat improvement projects will be developed and implemented to achieve the management objectives for this unit. Other resource uses/values within this unit are allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing. BLM-funded rangeland improvement projects or vegetation treatments, or livestock operator-funded projects or treatments will be authorized when compatible with the management objectives for this unit. Livestock operator-funded projects or treatments will be authorized if the proposed project or treatment would have a neutral or beneficial effect on the management objectives of the unit and the operator agrees to share benefits to meet objectives of the unit.

Forest Lands and Woodlands. Public lands are open to harvesting of forest products on forest lands and woodlands consistent with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 16: West Red Wash - 6,500 Acres - 0.2 percent of Resource Area

Management Unit 16 is located along the Little Snake River in the central part of the resource area. The majority of the lands in this unit are public lands administered by the BLM. Parcels of state and private lands are also found in this unit. Before 1910, the Little Snake River supported an extensive cottonwoods-willow-buffaloberry riparian ecosystem. Disturbance has since resulted in deterioration of vegetation quality and reduced streambank stability.

The management objectives for this unit are to protect and restore this riparian ecosystem. A wildlife habitat management plan (HMP) is currently being prepared for this unit and riparian habitat improvement projects will be developed and implemented to achieve the management objectives for this unit. Other resource uses/values within this unit are allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing. BLM-funded rangeland improvement projects or vegetation treatments, or livestock operator-funded projects or treatments will be authorized when compatible with the management objectives for this unit. Livestock operator-funded projects or treatments will be authorized if the proposed project or treatment would have a neutral or beneficial effect on the management objectives of the unit and and the operator agrees to share benefits to meet objectives in the unit.

Wildlife. Public lands are open to wildlife habitat management. Existing wildlife habitat projects will be managed and new projects will be designed to be compatible with the management objectives for this unit.

Recreation. Public lands are available for dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

Management Unit 17: Willow Creek - 1,000 Acres - Less than 0.1 percent of Resource Area

Management Unit 17 is located in the northeast corner of the resource area near Steamboat Lake. All lands in this unit are public lands administered by the BLM. The willow riparian areas associated with Willow Creek and Red Creek provide critical nesting and brood rearing habitat for greater sandhill crane, a state endangered species.

The management objectives for this unit are to maintain and improve critical habitat for greater sandhill crane. A wildlife habitat management plan (HMP) and wildlife habitat improvement projects will be developed and implemented to achieve the management objectives for this unit. Other resource uses/values within this unit will be allowed consistent with the management objectives for this unit. All resource uses are managed as described in the preceeding Management Actions Section of this document. Special stipulations, such as seasonal restrictions described in Table 4 of the Management Actions Section, will be added to permits, licenses, leases, or project plans, if necessary, to prevent or mitigate impacts resulting from any resource development or use on public lands.

Coal. Public lands are open to coal exploration consistent with the management objectives for this unit.

Oil and Gas. Public lands are open to oil and gas leasing and development consistent with the management objectives for this unit.

Other Minerals. Public lands are open to leasing of federal minerals and mineral material sales consistent with the management objectives for this unit. Lands are also open to locatable mineral exploration and development.

Livestock Grazing. Public lands are open to livestock grazing. BLM-funded rangeland improvement projects or vegetation treatments, or livestock operator-funded projects or treatments will be authorized when compatible with the management objectives for this unit. Livestock operator-funded projects or treatments will be authorized if the proposed project or treatment would have a neutral or beneficial effect on the management objectives of the unit and the operator agrees to share benefits to meet obectives in the unit.

Forest Lands and Woodlands. Public lands are open for harvesting of forest products on forest lands and woodlands consistent with the management objectives for this unit.

Recreation. Public lands are available to dispersed recreation use and developed recreation sites can be established consistent with the management objectives for this unit. Vehicle use in this management unit is limited to existing roads and trails.

Realty Actions. Realty actions, such as rights-of-way, leases, and permits, can occur consistent with the management objectives for this unit. Land tenure adjustments, primarily through exchanges or the Recreation and Public Purposes Act, can occur where the public interest will be best served.

CHAPTER III

CHAPTER III

CONSULTATION, COORDINATION, CONSISTENCY, AND PUBLIC PARTICIPATION

INTRODUCTION

In the course of preparing this resource management plan, considerable formal and informal efforts have been made to involve the public, other federal agencies, state agencies, and local governments in the planning process. Public participation is mandated by BLM regulations and, in addition, other opportunities have been provided for public comment.

PUBLIC PARTICIPATION

The planning process began in June 1983 with issue identification. An initial mailing list of about 1,000 individuals, organizations, and government agencies was developed so that all interested parties could be informed as the RMP evolved. The following list highlights the major public participation activities in preparation of the RMP/EIS.

June 12, 1983-Notice of Intent to prepare Little Snake RMP/EIS, published in Federal Register.

July 3, 1983-Mailer requesting public comments to determine the scope of the RMP/EIS and identify issues; included call for coal resource information.

July 18, 19, and 23, 1983-Public scooping meetings in Denver, Steamboat Springs, and Craig, Colorado.

July 26, 1983-Request for mineral information (sent by RMOGA and IPAMS to their members at BLM request).

February 24, 1984-Mailer requesting public comments on the proposed coal planning area.

April 1984-Little Snake RMP Report #1 (newsletter requesting public comment on issues and planning criteria).

October 1984-Little Snake RMP Report #2 (newsletter informing public of preliminary RMP alternatives).

October 23, 1984-Supplement to notice of intent published in Federal Register.

March 5, 1985-Meeting with various interest group representatives to discuss the proposed Preferred Alternative.

March 7, 1985-Request for comments from March 5, 1985, meeting participants on proposed Preferred Alternative as a follow-up to March 5, 1985, meeting.

April 8, 1985-Little Snake RMP Livestock/Wildlife Workshop, involving representatives of the livestock industry and the Colorado Division of Wildlife, to obtain proposals for wildlife and livestock numbers in the Preferred Alternative.

September 21 and 22, 1985-Meeting with Little Snake RMP workgroup to obtain proposals for any additional alternative. No consensus was reached on a new alternative, but comments were provided on various portions of the preliminary draft RMP/EIS.

March 6, 1986-The District Advisory Council sponsored a meeting to provide the public another opportunity to discuss the RMP/EIS and Wilderness Technical Supplement.

April 29, 1986-Meeting with Rocky Mountain Oil and Gas Association to discuss the draft plan and their concerns about leasing and development of fluid minerals.

June 20, 1986-Meeting with Environmental Protection Agency to discuss their comments and our responses.

In September 1986, the Bureau of Land Management issued the Proposed Little Snake Resource Management Plan and Final Environmental Impact Statement. The document contained the Proposed Plan for managing BLM-administered public lands within the Little Snake Resource Area in northwest Colorado.

The Proposed Plan received four letters of protest which have been resolved by the BLM Director. In considering the protests, it was determined that some of the points being protested were due to misunderstandings of the management descriptions in the Proposed Plan.

In order to clarify the management prescriptions a Revised Proposed Little Snake Resource Management Plan was issued in October of 1988. The revised proposed plan only changed the format and clarified management prescriptions. It did not change any management decisions.

The revised proposed plan received two letters of protest which were also resolved by the BLM Director.

In addition, numerous informal meetings with individuals were held throughout the process, and many requests for specific information were responded to. Both the Craig District Advisory Council and the Craig District Grazing Advisory Board have been briefed about the status of the RMP on numerous occasions and their comments have been solicited.

Informal consultation was held with the U.S. Fish and Wildlife Service. A list of threatened or endangered species that could be affected by this planning effort was requested on October 2, 1985. The U.S. Fish and Wildlife Service responded on October 2, 1985, with a memorandum furnishing a list of federally-listed threatened or endangered and candidate species that may be within the area of influence of the RMP. This memorandum stated that "it is impossible through one consultation to render 'may affect' or 'no effect' determination on all programs and activities that may be identified in the RMP/EIS". The BLM agrees, a biological assessment will be prepared for activity plans or site-specific actions that may be undertaken to implement the RMP and that may affect a threatened, endangered, or candidate species.

CONSULTATION AND COORDINATION

As part of the coal unsuitability review, formal consultation has been carried out with the U.S. Fish and Wildlife Service, the Colorado State Historic Preservation Officer, the Colorado Division of Wildlife, the Colorado Mined Land Reclamation Division, and the Colorado Natural Heritage Inventory. See Appendix 2, Methodology Used in Identifying Areas Acceptable for further Coal Leasing Consideration, for further information.

The National Park Service, U. S. Fish and Wildlife Service, and other federal agencies have provided information and technical data, as well as comments on various phases of the plan. Several informal meetings have been held with National Park Service representatives at Dinosaur National Monument.

The Colorado Department of Natural Resources has been involved from the beginning of the planning process in providing issues to be addressed, formulating and reviewing alternatives (including the preferred), and reviewing otherportions of the analysis. Formal briefings were held at the beginning of the process (June 1983) and during development of the Preferred Alternative (March 1985). A broad range of informal meetings and discussions have also been conducted throughout the process.

The Colorado Division of Wildlife and the U. S. Fish and Wildlife Service provided information and valuable technical assistance in developing the wildlife sections of this document. The Colorado Natural Heritage Inventory has provided much useful information for the natural history sections of the RMP/EIS. The Colorado Department of Natural Resources was a clearinghouse for comments, concerns, etc., from various state agencies.

The Colorado and Utah State historic preservation officers reviewed the EIS for compliance with the National Historic Preservation Act and other appropriate legal requirements for cultural resource compliance.

In accordance with 43 CFR 1610, consultation with the governors of Colorado and Utah was initiated upon release of the final EIS. Before the plan's approval, the governors were given 60 days to identify inconsistencies with approved state agency plans and provide recommendations to the Bureau of Land Management Colorado State Director.

Moffat and Routt counties have been involved from the outset in an attempt to coordinate the decisions of the resource management plan with the plans, policies, and goals of these counties.

Considerable coordination has been required within the BLM as well, particularly with adjoining BLM districts. Coordination with the Vernal District regarding the West Cold Spring and Diamond Breaks wilderness study areas has been particularly important.

CONSISTENCY WITH OTHER PLANS

This plan is consistent with the plans, programs, and policies of other federal agencies and of state and local governments, with the possible exception of wildlife numbers in the Colorado Division of Wildlife's 1988 Strategic Plan. Range monitoring studies may indicate that public rangelands may not support the numbers of wildlife identified in the strategic plan.

APPENDICES

APPENDIX 1

FEDERAL COAL PLANNING AREA

The federal coal planning area that has been delineated through the Little Snake Resource Management Plan includes federal coal resources within all or portions of 53 townships. This area includes portions of 16 townships that were covered in previous land use plan amendments. The coal planning area encompasses all lands with underlying coal mineral estate in the following townships:

T.3 N., R. 85 W.
Sec 7: Lot 10
Sec 18: Lots 9, 16

T.3.N., R.86.W
Sec l: 11 through 14

T. 3 N., R. 90 W.
Sec l: 6 through 10, 11, 12

T. 3 N., R. 91 W.
Sec 1l: through 3
Sec 4: N½NE¼, SE¼NE¼, E½SE¼
Sec 1 NE¼
Sec 12

T. 3 N., R. 92 W.
Sec 3 through 10, 15 through 21
Sec 28: Lots 1, 4, 6, 8, 10, 26, 27, 28, NW¼NW¼
Sec 29; 30

T. 3 N., R.93 W.
Sec ! through 18
Sec 19: Lots 1-3, E½W½, E½
Sec 20 through 28

T. 3 N., R.94 W.
Sec 1 through 18
Sec 19: N½NE¼, SE¼NE¼
Sec 20: N½
Sec 21: N½, N½S½, S½SE¼, SE¼SW¼
Sec 22 through 27
Sec 28: E½

T. 3. N., R. 95 W.
Sec 1
Sec 2: E½, E½NW¼, NW¼NW¼
Sec 11: E½NE¼
Sec 12: E½, NW¼, E½SW¼, NW¼SW¼
Sec 13: E½

T. 4 N., R. 86 W.

T. 4 N., R. 87 W.

T. 4 N., R. 88 W.

T. 4 N., R. 89 W.
Sec 7 through 35
Sec 36: N½, NW¼SE¼, NE¼SW¼

T. 4 N., R. 90 W.

T. 4 N., R. 91 W.

T. 4 N., R. 92 W.

T. 4 N., R. 93 W.

T. 4 N., R. 94 W.

T. 4 N., R. 95 W.
Sec 12, 13, 24, 25, 36

T. 5 N., R. 85 W.
Sec 5 through 8
Sec 17 through 20
Sec 29 through 32

T. 5 N., R. 86 W.

T. 5 N., R. 87 W.

T. 5 N., R. 88 W.

T. 5 N., R 89 W.

T. 5 N., R. 90 W.

T. 5 N., R. 91 W.

T. 5 N., R. 92 W.

T. 5 N., R. 93 W.

T. 6 N., R. 86 W.

T. 6 N., R. 87 W.

T. 6 N., R. 88 W.

T. 6 N., R. 89 W.

T. 6 N., R. 90 W.

T. 6 N., R. 91 W.

T. 6 N., R. 92 W.

T. 6 N., R. 93 W.

T. 7 N., R. 87 W.

T. 7 N., R. 88 W.

T. 7 N., R. 89 W.

APPENDIX 1

T. 7 N., R. 90 W.

T. 7 N., R. 91 W.

T. 7 N., R. 92 W.

T. 7 N., R. 93 W.

T. 7 N., R. 94 W.

T. 8 N., R. 86 W.
  Sec 4 through 8
  Sec 9: Lots 3, 4
  Sec 18
  Sec 17: Lots 1 through 6
  Sec 19: Lots 5 through 8

T. 8 N., R. 87 W.

T. 8 N., R. 88 W.

T. 8 N., R. 89 W.

T. 8 N., R. 90 W.

T. 8 N., R. 91 W.

T. 8 N., R. 92 W.

T. 8 N., R. 93 W.

T. 8 N., R. 94 W.

T. 9 N., R. 86 W.
  Sec 33

The coal planning area was delineated to:

1. Meet industry and public interest in coal development in the area;
2. Ensure better multiple-use decisions in the resource area;
3. Provide a comprehensive, long-term basis for activity planning in the resource area; and
4. Lessen the need significantly for future coal planning amendments or revisions to cover isolated parcels, unforeseen industry demand, etc.

The lands delineated as having federal coal development potential total approximately 638,758 acres and contain 5,888,818,000 tons of estimated recoverable coal. These lands are known to have potentially minable federal coal greater than 5 feet thick, with less than a 15 percent dip. Development potential is based on interest expressed by industry, proximity to existing and proposed coal leases, and areas of coal exploration where resource data has been obtained.

The degree of development potential and amount of coal resource data varies throughout the area. To account for this, the coal planning area has been divided into areas of high, medium, and low development potential and ranked accordingly.

Coal Leasing Interest Level 1 Areas

Lands determined to have high-development potential have been classified as coal leasing interest level 1 areas. Included are areas that have been identified by industry through a Call for Coal Resource Information, are located adjacent to existing coal leases, have recent exploration licenses, or are located in areas where sufficient data exist for delineation of new coal lease tracts. Most of the lands considered to have high-development potential meet more than one of the above criteria. Interest level 1 areas comprise approximately 344,880 acres and contain a total of 4,857,720,500 tons of estimated recoverable coal. This figure includes 49,190,000 tons of estimated recoverable coal within the Savery Preference Right Lease Application Area, which is outside the delineated coal planning area.

Coal Leasing Interest Level 2 Areas

Lands determined to have medium development potential have been classified as coal leasing interest level 2 areas. Included are those areas where no industry or public interest has been formally expressed but data indicate the existence of coal beds greater than 5 feet thick. These interest level 2 areas comprise approximately 22,240 acres and contain a total of 346,512,500 tons of estimated recoverable coal.

Coal Leasing Interest Level 3 Areas

Lands determined to have low-development potential have been classified as coal leasing interest level 3 areas. Included are areas located between lands of higher potential where coal resource data are limited. Interest level 3 areas comprise approximately 271,638 acres and contain a total of 684,585,000 tons of estimated recoverable coal.

APPENDIX 2

Federal Lands Review
METHODOLOGY USED IN IDENTIFYING AREAS ACCEPTABLE FOR FURTHER COAL LEASING CONSIDERATION

Four screens, required by 43 CFR 3420.1, are applied during land use planning. The screens are applied to identify which coal lands are acceptable for leasing consideration. The first screen identifies lands with coal development potential. The second screen subjects the land with development potential to the unsuitability review for protection of the most sensitive and valuable features of federal lands. The third screen, multiple land use decisions, may eliminate lands to protect other resource values not included in the second screen. The fourth screen, surface owner consultation, takes into account qualified surface owner's views on surface mining.

Lands found acceptable in this resource management plan (RMP) will be available for further consideration for leasing and/or exchange. However, all lands determined to be suitable, unsuitable, or unacceptable for further consideration for leasing and/or exchange may be reviewed and suitability determinations modified based on new data during activity planning efforts. None of the decisions in this resource management plan changes the unsuitability decision in the Final Savery Coal Environmental Impact Statement (Bureau of Land Mangement, Rawlins District, 1983). Table A2-1 summarizes the results of applying all the screens through this RMP.

TABLE A2-1

ACRES AVAILABLE FOR FURTHER CONSIDERATION FOR COAL LEASING
(excluding overlaps)*

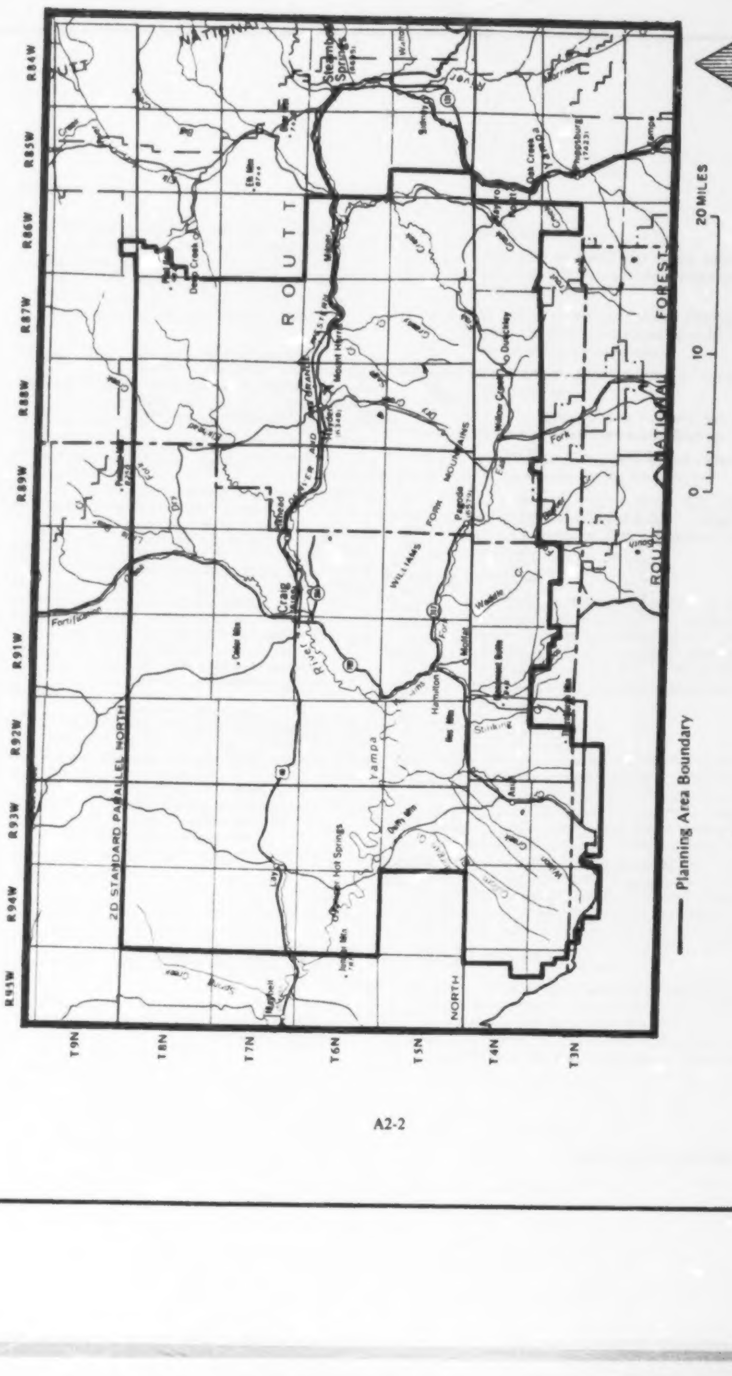
Screens	Results
Coal Development Potential	638,758
Unsuitabilty Review	(-104,261)
Acreage Remaining	534,497
Surface Owner Consultation	(-68,808)
Acreage Remaining	465,689
Multiple Use Tradeoffs	
Recreation	(-8,600)
Acreage Remaining	457,089
Total Acres Available Surface/Underground Methods	457,089
Total Acres Available Underground Methods Only (No Surface Disturbance)	181,669
Total Coal Tonnage Available	5.5 billion

* In some portions of the coal planning area, more than one screen was found to apply, e.g., portions of the Little Yampa Canyon SMRA were eliminated as a result of both unsuitability criteria and multiple use tradeoffs. Acreage for such areas was only subtracted once from the total planning area acreage.

The data used to complete the unsuitability screens are rated, based on quantity as well as quality. The quantity of the data used is rated as either adequate or inadequate. The quality of the data used is rated as either poor, fair, or good.

Coal Development Potential (Screen 1)

A total of approximately 638,758 acres (Map A2-1) or 5,888,818,000 tons, of coal were identified as having coal development potential, based on interest expressed by industry, proximity to existing and proposed coal leases, and areas of coal exploration where resource data has been obtained. The coal planning area includes the major surface minable coal resource of current interest to industry. This area has also had a history of land use plan amendments to provide lease areas and has required a continued commitment of field staff specialist time. This has resulted


R84W
R85W
R86W
R87W
R88W
R89W
R91W
R92W
R93W
R94W
R95W
T9N
T8N
T7N
T6N
T5N
T4N
T3N
NATIONAL
FOREST
ROUTT
NATIONAL
ROUTT
Steamboat Springs
Craig
Hayden
Milner
Mount Harris
Hamilton
Pagoda
Williams Fork Mountains
Yampa
River
Deep Creek
Oak Creek
Phippsburg
Yampa
Maybell
Juniper Hot Springs
Lay
Fortification
Cedar Mtn
2D STANDARD PARALLEL NORTH
NORTH
0
10
20 MILES
N
Planning Area Boundary

Map A2-1. Federal Coal Planning Area

in additional expense and has limited field staffs ability to devote time to data collection and monitoring. The federal coal resource extends outside this specific planning area; however, considering the life of this land use plan (15-20 years) all coal exploration and development is expected to be concentrated in this area, minimizing or eliminating the need for further amendments during the life of this plan. This does not include 60,122 acres of federal coal currently under lease.

The lands with coal resource development potential in the Little Snake coal planning area are located in the Yampa and Dansforth Hills Coal Fields. The coal planning includes federal coal within the following townships: MAP A2-1

Sixth Principal Meridian
T. 3 N., R. 85 W.
T. 3 N., R. 86 W.
T. 3 N., R. 90 W. - R. 95 W.
T. 4 N., R. 86 W. - R. 95 W.
T. 5 N., R. 85 W. - R. 93 W.
T. 6 N., R. 86 W. - R. 93 W.
T. 7 N., R. 87 W. - R. 94 W.
T. 8 N., R. 86 W. - R. 94 W.
T. 9 N., R. 86 W.

Approximately 638,758 acres federal coal lands.

Coal Unsuitability Review (Screen 2)

Regulations for coal management require the Bureau of Land Management to review federal lands for areas unsuitable for all or certain stipulated methods of coal mining. As a part of the Little Snake Resource Area Resource Management Plan, this review was accomplished by applying 19 of 20 unsuitability criteria to the lands designated as the coal planning area. The 20th unsuitability criterion, State Adopted Unsuitability Criteria, was not applied to these lands because the state of Colorado does not have any adopted criterion.

This unsuitability assessment is based on the best available data with time and resources available. Based on the application of the criteria, 534,497 acres, or 5,679,467,500 tons of coal, were found acceptable for further consideration for leasing and/or exchange. Approximately 104,261 acres or 160,160,500 tons of coal were found to be unsuitable for surface mining and surface disturbance associated with surface or underground mining based on the criteria. Table

A2-2 lists the areas found unsuitable by individual criterion. Map A2-2 shows the locations of unsuitable areas.

The following criteria, including exceptions and exemptions, have been taken from federal regulations in 43 CFR 3461. A descripiton of the results of the application follows:

Criterion 1—Federal Lands Systems

All federal lands included in the following land systems or categories shall be considered unsuitable: National Park System, National Wildlife Refuge System, National System of Trails, National Wilderness Preservation System, National Wild and Scenic Rivers System, National Recreation Areas, lands acquired with money derived from the Land and Water Conservation Fund, national forests, and federal lands in incorporated cities, towns and villages.

Exceptions:

(1) A lease may be issued within the boundaries of any National Forest if the Secretary finds no significant recreational, timber, economic or other values which may be incompatible with the lease: and (A) surface operations and impacts are incident to underground coal mine, or (B) where the Secretary of Agriculture determines, with respect to lands which do not have significant forest cover within those National Forests west of the 100th meridian, that surface mining may be in compliance with the Multiple-Use Sustained-Yield Act of 1960, the Federal Coal Leasing Amendments Act of 1976 and the Surface Mining Control and Recalamation Act of 1977. (2) A lease may be issued within the Custer National Forest with the consent of the Department of Agriculture as long as no surface coal mining operations are permitted.

Exemptions:

The application of this criterion to lands within the listed land systems and categories is subject to valid existing rights, and does not apply to surface coal mining operations existing on August 3, 1977. The application of the portion of this criterion applying to land proposed for inclusion

TABLE A2-2

SUMMARY OF UNSUITABILTY RESULTS

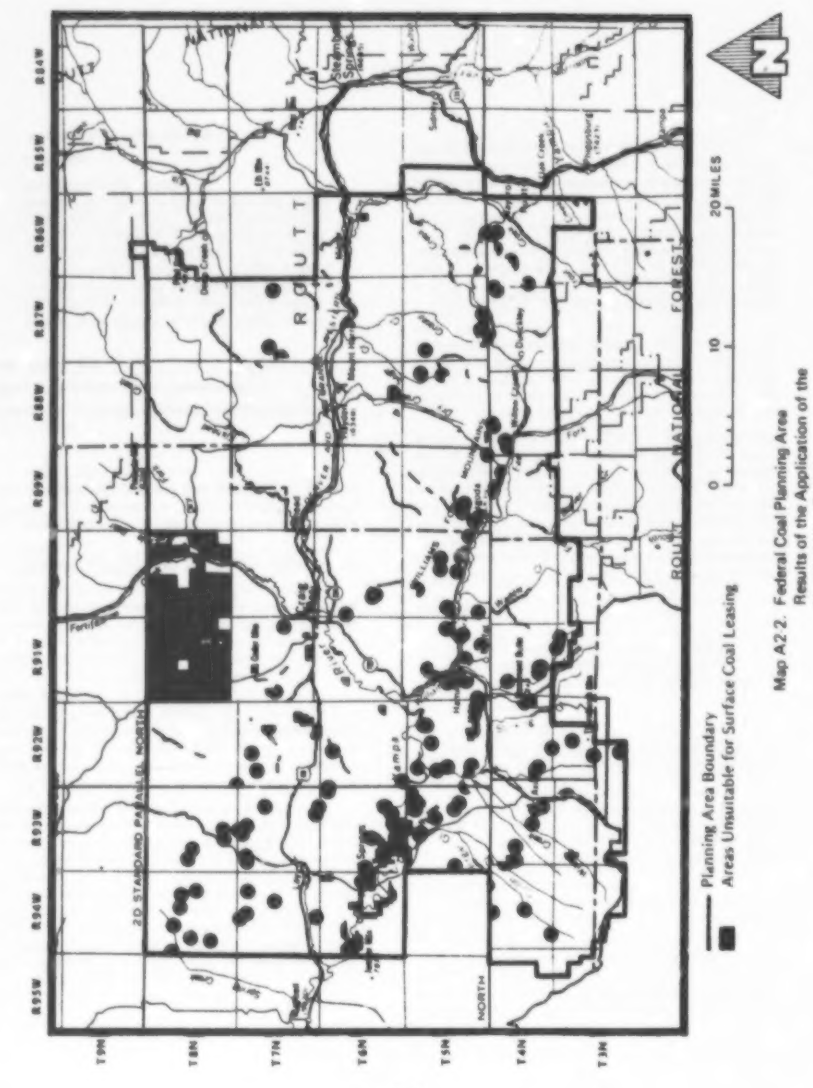
Criterion	Acres Before Exceptions	 After Exceptions	 After[4] Exemptions
1 Federal Lands Systems	322	322	322
2 Rights-of-way and Easements	3,041	0	0
3 Buffer Zones along rights-of-way and adjacent to communities and buildings	3,151	1,486	1,486
4 Wilderness Study Areas	0	0	0
5 Scenic Areas	0	0	0
6 Lands used for scientific studies	0	0	0
7 Historic Lands and Sites	0	0	0
8 Natural areas	0	0	0
9 Federally listed Endangered Species	7,541	7,541	7,541
10 State listed Endangered Species	0	0	0
11 Bald and Golden Eagle Nests	48,207	15,898	45,898
12 Bald and Golden Eagle Roost and Concentration Areas	7,541[1]	7,541[1]	7,541[1]
13 Falcon Cliff Nesting Site	2,402	2,402	2,402
14 Migratory Birds	2,681	2,681	2,681
15 State Resident Fish and Wildlife	611,878[3]	37,960	37,960
16 Floodplains	5,104	5,104	5,104
17 Municipal Watersheds	0	0	0
18 National Resource Waters	0	0	0
19 Alluvial Valley Floors	1,948[1]	1,948[2]	1,948[2]
20 State Proposed Criterion	0	0	0
Total Lands Unsuitable (excluding overlaps)	611,878	104,261	104,261

[1] These lands are the same identified in Criterion 9.

[2] Includes 1,081 acre overlap with Criterion 16.

[3] Overlaps with all other criterion.

[4] Results after applying the Exemptions did not change because the criterion were not applied to leases lands (43CFR 3461.4-2).



Map A2.2. Federal Coal Planning Area
Results of the Application of the
Unsuitability Criteria

in the listed systems does not apply to lands: to which substantial legal and financial commitments were made prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

The coal planning area does not contain the following land systems or categories: National Park System, National Wildlife Refuge System, National System of Trails, National Wilderness Preservation System, National Wild and Scenic Rivers System, National Recreation Areas, lands acquired with money derived from the Land and Water Conservation Fund, or National Forests. Therefore, these land systems or categories would not be affected.

Craig is the only incorporated city within the planning area which has federal coal lands within the city limits. Although Hayden is an incorporated town, no federal coal lands occur within the city limits. All other towns and villages within the planning area are not incorporated. Therefore, they are not considered under this criterion. The quantity of data available is adequate, and the quality of the data is good.

Results

The only lands unsuitable are the split-estate lands within the incorporated city limits of Craig, Colorado, where the United States owns the coal resource. Under Criterion 1 the following lands are unsuitable:

T. 7 N., R. 90 W., 6th P.M.
  Sec. 31: Lots 6 and 7, E½/SE¼
  Sec. 32: W½SW¼

T. 7 N., R. 91 W., 6th P.M.
  Sec. 35: Lots 4 and 5

322 acres

Criterion 2—Rights-Of-Way And Easements

Federal lands that are within rights-of-way or easements or within surface leases for residential, commercial, industrial, or other public purposes, shall be considered unsuitable.

Exceptions:

A lease may be issued, and mining operations approved, in such areas if the surface management agency determines that:

1. All or certain types of coal development (e.g., underground mining) will not interfere with the purpose of the right-of-way or easement; or

2. The right-of-way or easement was granted for mining purposes; or

3. The right-of-way or easement was issued for a purpose for which it is not being used; or

4. The parties involved in the right-of-way or easement agree, in writing, to leasing; or

5. It is impractical to exclude such areas due to the location of coal and method of mining, and such areas or uses can be protected through appropriate stipulations.

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

Over 500 miles of linear rights-of-way cross the coal planning area. For the most part, these authorizations consist of small diameter (10 inches or less) buried oil and gas pipelines, buried telephone cables (generally located along the edges of roads), country roads, state and federal highways, and low voltage (7.2Kv) power distribution lines. In addition to these, there are several high voltage power transmission lines (138 Kv or more) and a few larger diameter pipelines. Approximately 3,000 acres of federal land within the coal planning area could fall under the unsuitability Criterion 2 due to these linear rights-of-way. These figures are extremely rough, however, because of the lack of right-of-way data for split-estate lands.

There is one site-type right-of-way (approximately 0.74 acres) and one surface lease (40.36 acres) within the coal planning area. The right-of way lies in T. 7 N., R. 91 W., 6th P.M. section 9, and authorizes the Cedar Mountain communication site. The surface lease is for a vocationaltechnical school in T. 7 N., R. 91 W., 6th P.M., section 25. The Cedar Mountain site is located on a basaltic outcrop that is not favorable for surface mining. The surface lease is immediately adjacent to the Craig City limits, and it is not likely that surface mining would ever occur directly adjacent to the city limits. The right-of-way and surface lease, therefore, would generally not be adversely affected or interfered with. Coal leasing and development within the area shows that agreements can be reached between the parties involved for relocating the facilities.

A stipulation indicating the lease is subject to prior existing rights will protect the right-of-way holder. The quantity of data available for rights-of-way on split-estate lands is inadequate. The quantity of data available for the remaining portions of this analysis is adequate. The quality of the data used is good.

Results

After application of exceptions 1,4, and 5 to the linear rights-of-way, these areas are suitable with the following stipulation:

1. This lease is subject to all prior existing rights on these lands.
2. After application of exception 5 to the surface-type right-of-way and surface lease, these areas are suitable with the stipulation that this lease is subject to all prior existing rights on these lands.

Criterion 3—Buffer Zones Along Rights-Of-Way and Adjacent to Communities and Buildings

Federal lands affected by section 522(e) (4) and (5) of the Surface Mining Control and Reclamation Act of 1977 shall be considered unsuitable. This includes lands within 100 feet of the outside line of the right-of-way of a public road or within 100 feet of a cemetery, or within 300 feet of any public building, school, church, community or institutional building or public park or within 300 feet of an occupied dwelling.

Exceptions:

A lease may be issued for lands:

1. Used as mine access roads or haulage roads that join the right-of-way for a public road;

2. For which the Office of Surface Mining Reclamation and Enforcement has issued a permit to have public roads relocated.

3. If, after public notice and opportunity for public hearing in the locality, a written finding is made by the authorized officer that the interests of the public and the landowners affected by mining within 100 feet of a public road will be protected.

4. For which owners of occupied dwellings have given written permission to mine within 300 feet of their buildings.

Exemptions:

The application of this criterion is subject to valid existing rights, and does not apply to surface coal mining operations existing on August 3, 1977.

Analysis

There are over 100 miles of public roads in the coal planning area. Most are county roads under the jurisdiction of Routt and Moffat counties. State routes 13/789 and 317 and U.S. Highway 40 also cross the general area but only pass over small, scattered parcels of federal coal. The only cemetary, public buildings, schools, churches, community or institutional buildings, or public parks in the planning area are either located over nonfederal minerals or lie within the city limits of Craig; therefore, they would not be affected.

Many of the occupied dwellings in the coal planning area are located in unincorporated subdivisions around Craig. Although there are several subdivisions in the area, some only exist on paper. However, some subdivisions are known to have occupied dwellings and have been identified in the results of this analysis.

Other dwellings are scattered throughout the planning area. With over 700 landowners identified in the area, at least 700 dwellings could exist. Many of the dwellings are not permanent, some are seasonal, and others are most likely to be vacant at any given time. Because of this, existing data is lacking and if accumulated at this time, would be extremely unreliable at the time of leasing. Therefore, the portion of this criterion and exception dealing with occupied dwellings other than subdivisions will be applied at the activity planning stage for coal leasing.

Exception 3 was applied to that portion of Criterion 3 dealing with public roads by publishing a public notice in the Daily Press and the Steamboat Pilot (local newspapers or distribution).

The quantity of data available for occupied dwellings is inadequate for this analysis. The quantity of data available for public roads, cemeteries, public buildings, institutional buildings, and public parks is adequate. The quality of the data used is good.

Results

Through application of exception 3, a 30-day comment period was allowed, and no comments were received. Past coal mining activities have not resulted in adverse effects on the public or those landowners affected by mining within 100 feet of a public road. Therefore, the authorized officer has made a decision that all lands within 100 feet of the outside line of the right-of-way for public roads in the coal planning area are suitable for coal mining (see the written finding in Exhibit A).

The subdivisions, which are known to have occupied dwellings, are unsuitable. These subdivisions are within the following lands:

T. 7.N., R. 91 W., 6th P.M.
  Sec. 24: Lots 15 and 16
  Sec. 25: Lots 1 and 2
  Sec. 34: S½

T. 7 N., R. 92 W., 6th P.M.
  Sec 25: NW¼, W½SW¼
  Sec 26: E½NE¼,SE¼
  Sec 34: S½NE¼,N½/SE¼,N½N½,N½SW¼SE¼,
    SE¼SE¼
  Sec 35: NE¼,SW¼

Approximately 1,486 acres.

Those lands lying within 300 feet of occupied dwellings, other than the subdivisions identified previously as unsuitable, will be considered acceptable for further consideration pending collection of the data required to apply this criterion. Because of the lack of permanence of many dwellings, the seasonal use of some dwellings, the recurring vacancy of dwellings and the resultant unrealiability of data collected too far in advance of actual coal leasing, the final analysis of occupied dwellings will be performed at the coal activity planning stage.

Criterion 4—Wilderness Study Areas

Federal lands designated as wilderness study areas shall be considered unsuitable while under review by the Administration and the Congress for possible wilderness designation. For any Federal land which is to be leased or mined prior to completion of the wilderness inventory by the surface management agency, the environmental assessment or impact statement on the lease sale or mine plan shall consider whether the land possesses the characteristics of a wilderness study area. If the finding is affirmative, the land shall be considered unsuitable, unless issuance of noncompetitive coal leases and mining on leases is authorized under the Wilderness Act and the Federal Land Policy and Management Act of 1976.

Exemption:

The application of this criterion to lands for which the Bureau of Land Management is the surface management agency and lands in designated wilderness areas in National Forest is subject to valid existing rights.

Results

The coal planning area has no lands designated as wilderness study areas or wilderness areas.

The quantity of the data available is adequate. The quality of the data used is good.

Criterion 5—Scenic Areas

Scenic Federal lands designated by visual resource management analysis as Class I (an area of outstanding scenic quality or high visual sensitivity) but not currently on the National Register of Natural Landmarks shall be considered unsuitable. A lease may be issued if the surface management agency determines that surface coal mining operations will not significantly diminish or adversely affect the scenic quality of the designated area.

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results

The coal planning area has no lands designated as Class I visual resource management areas.

The quantity of data available is adequate. The quality of the data is good.

Criterion 6—Lands Used For Scientific Studies

Federal lands under permit by the surface management agency, and being used for scientific studies involving food or fiber production, natural resources, or technology demonstrations and experiments shall be considered unsuitable for the duration of the study, demonstration or experiment, except where mining could be conducted in such a way as to enhance or not jeopardize the purposes of the study, as determined by the surface management agency, or where the principal scientific user or agency gives written concurrence to all or certain methods of mining.

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments, prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Results

No such lands exist within the coal planning area.

The quantity of data available is adequate. The quality of the data is good.

Criterion 7—Historic Lands And Sites

All publicly owned places on federal lands which are included in the National Register of Historic Places shall be considered unsuitable. This shall include any areas that the surface management agency determines, after consulation with the Advisory Council on Historic Preservation and the State Historic Preservation Officer, are necessary to protect the inherent values of the property that made it eligible for listing in the National Register.

Exceptions:

All or certain stipulated methods of coal mining may be allowed if, after consultation with the Advisory Council on Historic Preservation and the State Historic Preservation Officer, they are approved by the surface management agency, and, where appropriate, the State or local agency with jurisdiction over the historic site.

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; on which include operations on which a permit has been issued.

Results

There are no publicly owned cultural or historical resources on the National Register of Historic Places within the coal planning area. Existing cultural resource surveys cover only a small portion of the federal lands involved.

The quantity of data available is inadequate to identify all potential National Register Sites, since only a small portion of the area has been inventoried. However, the quality of the data used is good and is based on the current list of National Register of Historic Places.

Consultation

Formal consultation was carried out with the Colorado State Historic Preservation Officer (SHPO). SHPO did identify two sites; however, these sites are not unsuitable under Criterion 7, as amended in Federal Registrer Vol. 48, No. 236, dated Wednesday, December 7, 1983 (see consultation letter in Exhibit B).

Criterion 8—Natural Areas

Federal lands designated as natural areas or as National Natural Landmarks shall be considered unsuitable.

Exceptions:

A lease may be issued and mining operation approved in an area or site if the surface management agency determines that:

1. With the concurrence of the states, the area or site is of regional or local significance only;

2. The use of appropriate stipulated mining technology will result in no significant adverse impact to the area or site; or

3. The mining of the coal resource under appropriate stipulations will enhance information recovery (e.g., paleontological sites).

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which includes operations on which a permit has been issued.

Results

There are no such lands within the coal planning area.

The quantity of data available is adequate, and the quality of the data is good.

Criterion 9—Federally Listed Endangered Species

Federally designated critical habitat for threatened or endangered plant and animal species, and habitat for federally threatened or endangered species which is determined by the Fish and Wildlife Service and the surface management agency to be of essential value and where the presence of threatened or endangered species has been scientifically documented, shall be considered unsuitable.

Exception:

A lease may be issued and mining operations approved if, after consultation with the Fish and Wildlife Service, the Service determines that the proposed activity is not likely to jeopardize the continued existence of the listed species and/or its critical habitat.

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

No federally designated critical habitats or threatened or endangered plant species exist within the coal planning area; therefore, none would be affected. However, federally listed endangered animal species and their habitats occur within the coal planning areas.

The riparian and upland habitats within ½ mile either side of the Yampa River provide essential roosting and hunting areas for wintering bald eagles, a federally listed endangered species. Significant numbers of bald eagles concentrate there annually between November and April because of the availability of large cottonwoods that serve as roost and perch trees, and food sources—fish, waterfowl, rabbits, and carrion.

Removal of these trees or the vegetation that supports prey animals or disturbance by human activity in this essential habitat area would adversely affect bald eagles.

The Yampa River itself provides essential habitat for the federally endangered Colorado squawfish. Modification of water quality and quantity would adversely affect these fish.

The quantity of data available on bald eagles and fish species is adequate. The data quality on bald eagles and fish species is good based on recent surveys conducted by USFWS, Colorado Division of Wildlife (DOW), and BLM. The quality of data on black-footed ferrets is poor.

Results

A buffer zone ½ mile on either side of a section on the Yampa River within the coal planning area is unsuitable because of bald eagle wintering and Colorado squawfish habitats. The lands that are unsuitable are described as follows:

T. 5 N., R. 93 W., 6th P.M.
  Sec. 1: Lots 5, 6, 7, and 8, S½N½, N½S½, S½W¼, SW¼SE¼
  Sec. 2: All
  Sec. 3: Lots 7 and 8, S½NW¼
  Sec. 4: Lots 5, 6, 7, and 8, S½NE¼
  Sec. 5: Lots 5, 6, 7, and 8, S½NW¼
  Sec. 6: Lots 1 and 2, SE¼NW¼, S½NE¼
  Sec. 11: NE¼, NE¼NW¼
  Sec. 12: NE¼NW¼

T. 6 N., R. 93 W., 6th P.M.
  Sec. 19: Lot 8
  Sec. 28: SW¼SW¼
  Sec. 29: NW¼, N½SW¼, SW¼SW¼, Lot 5
  Sec. 30: Lots 13 and 14, N½SE¼, NE¼
  Sec. 31: Lots 11 and 14
  Sec. 32: Lots 1, 2, 3, 4, and 8, NE¼NE¼, S½SE¼, SE¼SW¼
  Sec. 33: All
  Sec. 34: SW¼, W½SE¼

T. 6 N., R. 94 W., 6th P.M.
  Sec. 7: Lot 8, SE¼SW¼, S½S½SE¼
  Sec. 8: Lots 1 and 3, SW¼SW¼, N½S½
  Sec. 9: Lot 1
  Sec. 15: Lots 1, 3, 4, and 6
  Sec. 16: Lot 6
  Sec. 17: Lots 3,4, and 5
  Sec. 18: Lots 5, 6, and 7, E½, E½W½
  Sec. 21: Lots 2, 4, and 7, W½SE¼
  Sec. 22: Lot 8
  Sec. 23: Lot 6, N½SE¼
  Sec. 24: Lots 1 and 3, N½S½
  Sec. 25: Lots 1 and 10
  Sec. 26: Lot 9
  Sec. 27: Lots 2, 3, 5, 7, and 8, S½NW¼, E½SW¼
  Sec. 28: NW¼NE¼, SE¼NE¼
  Sec. 34: Lot 2, NW¼NE¼, SE¼NE¼
  Sec. 35: NW¼NE¼, NE¼NW¼, S½NW¼

7,541 acres

Consultation

Consultation was carried out with the USFWS. They indicated bald eagles roost primarily along the Yampa River and wetlands. Because of the importance of riparian habitats to bald eagles and other migratory birds, USFWS requested a ½ mile buffer area be declared unsuitable for surface disturbance and occupancy along each side of these riparian corridors and wetlands. USFWS also indicated that the black-footed ferret, Colorado squawfish and humpback chub may occur in the area. However, BLM has defined the most important area under its jurisdiction and declared it unsuitable under this criterion. (See consultation letters in Exhibit B.)

Criterion 10—State Listed Endangered Species

> Federal lands containing habitat determined to be critical or essential for plant or animal species listed by a state pursuant to state law as endangered or threatened shall be considered unsuitable.
>
> Exception:
>
> A lease may be issued and mining operations approved if, after consultation with the state, the surface management agency determines that the species will not be adversely affected by all or certain stipulated methods of coal mining.
>
> Exemptions:
>
> This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

There are no lands in the planning area that contain critical or essential habitats of plants listed pursuant to state law as threatened or endangered. However, the greater sandhill crane, a state listed endangered animal species, occurs within the coal planning area. It uses willow-lined drainages for nesting and grain fields and river bottoms for feeding and staging. These birds are sensitive to human activity, especially near their nests.

However, the quantity of data currently available from the Colorado Division of Wildlife is not adequate to delineate these critical or essential habitats if they exist within the coal planning area. The quality of existing data is fair. Therefore, no lands can be declared unsuitable, and the exception cannot be applied at this time. Site specific analysis on coal lease tracts will further address these critical or essential habitats.

Results

No lands are unsuitable under this criterion.

Consultation

Consultation was carried out with the Colorado Division of Wildlife, which did not believe any of the area was unsuitable under Criterion 10 since its habitat needs can be protected with stipulations.

Consultation was also carried out with the Colorado Natural Heritage Inventory, which identified some rare plant species; however, none are listed pursuant to state law (see letters in Exhibit B).

Criterion 11—Bald and Golden Eagle Nests

> A bald or golden eagle nest or site on Federal lands that is determined to be active and an appropriate buffer zone of land around the nest site shall be considered unsuitable. Consideration of availability of habitat for prey species and of terrain shall be included in the determination of buffer zones. Buffer zones shall be determined in consultation with the Fish and Wildlife Service.
>
> Exception:
>
> A lease may be issued if:
>
> 1. It can be conditioned in such a way, either in manner or period of operation, that eagles will not be disturbed during breeding season; or
>
> 2. The surface management agency, with the concurrence of the Fish and Wildlife Service, determines that the golden eagle nest(s) will be moved.
>
> 3. Buffer zones may be decreased if the surface management agency determines that the active eagle nests will not be adversely affected.
>
> Exemptions:
>
> This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; on which include operations on which a permit has been issued.

Analysis

U.S. Fish and Wildlife surveys conducted in the last 3 years have identified golden eagle nests throughout the coal planning area. Nesting birds are especially sensitive to human disturbance and will abandon their young, if harassed. Generally a ½ mile radius buffer zone (502 acres) around a nest is needed to protect nesting eagles. Data on active nest locations is good due to recent U.S. Fish and Wildlife surveys. Actual nest site locations will be defined to the nearest ¼ section before or during the activity planning stage for coal leasing. The quantity of data available is adequate. Data quality is good, based on recent surveys conducted by U.S. Fish and Wildlife Service and Colorado Division of Wildlife.

Results

Table A2-3 lists nest sites that are unsuitable.

Site-specific information has been obtained on some nest sites through recent activity planning efforts. Through application of the exceptions, it was determined the following lands are suitable, the following stipulation: To protect nesting golden eagles, no surface occupancy will be allowed at any time and no activity will be allowed between February 1 and and July 31 annually in the following areas:

T. 5 N., R. 92 W., 6th P.M.
  Sec. 23: W½SE¼

T. 4 N., R. 87 W., 6th P.M.
  Sec. 12: SE¼, SE¼NE¼
  Sec. 13: N½NE¼

T. 4 N., R. 86 W., 6th P.M.
  Sec. 7: Lots 7, 8, 13, 14
  Sec. 18: Lot 4

TABLE A2-3

BALD AND GOLDEN EAGLE NEST SITE

Township	Nest Sites
T. 3 N., R. 86 W.	1
T. 3 N., R. 91 W.	3
T. 3 N., R. 92 W.	3
T. 3 N., R. 93 W	3
T. 3 N., R. 94 W.	1
T. 4 N., R. 86 W.	3
T. 4 N., R. 87 W.	2
T. 4 N., R. 88 W.	4
T. 4 N., R. 89 W.	5
T. 4 N., R. 91 W.	4
T. 4 N., R. 92 W.	8
T. 4 N., R. 93 W.	7
T. 4 N., R. 94 W.	3
T. 5 N., R. 86 W.	4
T. 5 N., R. 87 W.	5
T. 5 N., R. 88 W.	1
T. 5 N., R. 89 W.	5
T. 5 N., R. 90 W	1
T. 5 N., R. 91 W.	1
T. 5 N., R. 92 W.	1
T. 5 N., R. 93 W.	1
T. 6 N., R. 86 W.	1
T. 6 N., R. 88 W.	2
T. 6 N., R. 90 W.	3
T. 6 N., R. 92 W.	1
T. 6 N., R. 92 W.	8
T. 6 N., R. 93 W.	17
T. 6 N., R. 94 W.	7
T. 7 N., R. 87 W.	3
T. 7 N., R. 91 W.	4
T. 7 N., R. 92 W.	4
T. 7 N., R. 93 W.	5
T. 7 N., R. 94 W.	3
T. 8 N., R. 90 W.	2
T. 8 N., R. 92 W.	2
T. 8 N., R. 93 W.	6
T. 8 N., R. 94 W.	4

Approximately 45,898 acres.

T. 6 N., R. 91 W., 6th P.M.
  Sec. 31: Lot 9

T. 6 N., R. 92 W., 6th P.M.
  Sec. 25: Lot 1, S½NE¼

T. 5 N., R. 90 W., 6th P.M.
  Sec. 9: Lot 3
  Sec. 14: Lot 3, 4

T. 7 N., R. 94 W., 6th P.M.
  Sec. 2: S½SW¼, W½SE¼, SW¼NE¼, W½SE¼NE¼, W½E½SE¼
  Sec. 3: Lot 8, E½SE¼SE¼,SW¼NW¼, W½SW¼, W½SE¼NW¼,W½E½SW¼
  Sec. 4: Lot 5, S½N½,E½E½SW¼,SE¼

T. 8 N., R. 92 W., 6th P.M
  Sec: 31: Lot 5

T. 8 N., R. 93 W., 6th P.M.
  Sec 32: Lot 1

T. 8 N., R. 94 W., 6th P.M.
  Sec. 33: SW¼, W½SE¼, and W½E½SE¼

Approximately 1,980 acres

Because of the large size of the coal planning area and the large number of identified nests, it was determined that the exceptions did not apply at this time. When more limited areas for potential leasing are defined during tract delineation, the Fish and Wildlife Service and Bureau of LandManagement will field review specific nests to determine whether they should continue to be considered unsuitable or whether the exceptions can be reapplied and what protection/mitigative measures are appropriate. This is also necessary because of the mobil nature of the resource, its sensitivity to other environmental factors, including other activities on public and private surface and its mortality.

Consultation

Consultation was carried out with the U.S. Fish and Wildlife Service, which have recommended the use of ½ mile radius buffer zones for the nest sites. However, USFWS requested these areas be unsuitable until the exceptions can be reapplied since these buffers can be modified based on topography, habitats/biological needs, and proposed surface activities. A consultation letter was received from USFWS May 21, 2985. Further consultation was carried out after (see Exhibit B) the May 21, 1984, response to clarify application of the exceptions.

Criterion 12—Bald and Golden Eagle Roost and Concentration Areas

> Bald and golden eagle roost and concentration areas of federal lands used during migration and wintering shall be considered unsuitable.
>
> Exception:
>
> A lease may be issued if the surface management agency determines that all or certain stipulated methods of coal mining can be conducted in such a way, and during such periods of time, to ensure that eagles shall not be adversely disturbed.
>
> Exemptions:
>
> This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

Essential wintering areas occur along the Yampa River and must be protected to ensure the continued existence of roost trees and prey that occur along the river. Removal of these trees or the vegetation that supports prey animals, or disturbance by human activity in these areas, would adversely affect these eagles.

The quantity of data available is adequate. Data quality is good based on recent surveys conducted by U.S. Fish and Wildlife Service, Colorado Division of Wildlife, and Bureau of Land Management.

Results

A 7,541 acre buffer zone ½ mile either side of the Yampa River within the coal planning area is unsuitable because it is a bald eagle winter concentration area. These lands are the same ones described in criterion 9.

Consultation

Consultation was carried out with the USFWS, which indicated that bald eagles roost primarily along the Yampa River and wetlands. Because of the importance of riparian habitats to bald eagles and other migratory birds, USFWS requested a ½ mile buffer be declared unsuitable for surface disturbance and occupancy along each side of these riparian corridors and wetlands. As time permits, USFWS believes that this buffer may be adjusted, based on site specific information of habitats use and proposed activities.

However, BLM has defined the most important area under its jurisdiction and declared it unsuitable under this criterion. There are no future plans to adjust these boundaries because this area would still remain unsuitable under criterion 9. (See consultation Letter in Exhibit B.)

Criterion 13—Falcon Cliff Nesting Site

> Federal lands containing a falcon (excluding kestrel) cliff nesting site with an active nest and a buffer zone of federal land around the nest site shall be considered unsuitable. Consideration of availability of habitat for prey species and of terrain shall be included in the determination of buffer zones. Buffer zones shall be determined in consultation with the Fish and Wildlife Service.
>
> Exception:
>
> A lease may be issued where the surface management agency, after consultation with the Fish and Wildlife Service, determines that all or certain stipulated methods of coal mining will not adversely affect the falcon habitat during the periods when such habitat is used by the falcons.
>
> Exemptions:
>
> This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

Prairie falcon nests have been identified through recent U.S. Fish and Wildlife surveys. Nesting birds are sensitive to human disturbance and will abandon their young. A ½ mile radius buffer zone is generally needed to protect nesting falcons. The quantity of data available is adequate. Data quality on active nest locations is good because of recent U.S. Fish and Wildlife surveys. Actual nest site locations will be defined to the nearest ¼ section before or during activity planning stage for coal leasing.

Results

Table A2-4 lists nest sites that are unsuitable.

TABLE A2-4

FALCON NEST SITES

Township	Nest Sites
T. 4 N., R. 86 W	2
T. 5 N., R. 86 W.	1
T. 5 N., R. 87 W.	1
T. 5 N., R. 88 W.	2
T. 5 N., R. 89 W.	1
T. 5 N., R. 90 W.	1
T. 5 N., R. 92 W.	1
T. 6 N., R. 93 W.	1

Approximately 2,402 acres

The rational for reapplying the exceptions is the same as that given under criterion 11.

Consultation

Consultation was carried out with the U.S. Fish and Wildlife Service, which have recommended the use of ½ mile radius buffer zones for the nest sites. However USFWS requested these areas be unsuitable until the exceptions can be reapplied, since these buffers could be modified based on topography, habitats/biological needs and proposed surface activities. A consultation letter was received from U.S. Fish and Wildlife Service May 21, 1984. Further consultation was carried out after (see Exhibit B) the May 21, 1984, response, to clarify application of the exceptions.

Criterion 14—Migratory Birds

Federal lands which are high priority habitat for migratory bird species of high Federal interest on a regional on national basis, as determined jointly by the surface management agency and the Fish and Wildlife Service, shall be considered unsuitable.

Exception:

A lease may be issued where the surface management agency, after consultation with the fish and wildlife Service, determines that all or certain stipulated methods of coal mining will not adversely affect the migratory bird habitat during the periods when such habitat is used by the species.

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

Nest sites of the ferruginous hawk, a migratory bird of high federal interest have been identified through recent U.S. Fish and Wildlife surveys. These sites occur within the coal planning area. A ½ mile buffer zone is generally needed to protect this bird from harassment by human activity. Actual nest site locations will be defined to the nearest ¼ section before or during activity planning stage for coal leasing.

Results

Table A2-5 lists nest sites that are unsuitable.

TABLE A2-5

MIGRATORY BIRD NEST SITES

Township	Nest Sites
T. 7 N., R. 92 W.	1
T. 7 N., R. 93 W.	5
T. 8 N., R. 94 W.	2

Approximately 2,681 acres.

The rationale for reapplying the exceptions is the same as that given under criterion 11.

Consultation

Consultation was carried out with the U.S. Fish and Wildlife Service, which they recommended the use of ½ mile radius buffer zones for the nest sites. However, USFWS requested these areas be unsuitable until the exceptions can be reapplied, since these buffers could be modified based on topography, habitats/biological needs and proposed surface activities. Consultation letter was received from U.S. Fish an Wildlife Service May 21, 1984. Further consultation was carried out on August 23, 1984, to clarify application of the exceptions.

Criterion 15—State Resident Fish And Wildlife

Federal lands which the surface management agency and the state jointly agree are fish and wildlife habitat for resident species of high interest to the state and which are essential for maintaining these priority wildlife species shall be considered unsuitable. Examples of such lands which serve a critical function for the species involved include:

1. Active dancing and strutting grounds for sage grouse,sharp-tailed grouse, and prairie chicken;
2. Winter ranges most critical for deer, antelope, and elk; and
3. Migration corridors for elk.

A lease may be issued if, after consultation with the state, the surface management agency determines that all or certain stipulated methods of coal mining will not have a significant long-term impact on the species being protected.

Exemptions:

This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

A large portion of the coal planning area is critical habitat for mule deer, elk, antelope, sage grouse, and sharp-tailed grouse. Colorado Division of Wildlife (CDOW) provided maps showing these severe winter ranges, concentration areas, migration routes, and production areas. These areas are essential to the continued maintenance of these populations. Two townships, T. 8 N., R. 90 and 91 W., are particularly important to mule deer and elk. CDOW has recommended that no more than 10 percent of these townships be leased at one time. Currently 6,424 acres or 14 percent has been leased by the Colorado State Land Board. Therefore, no additions as federal leasing should occur and the remaining 37,960 acres of federal coal lands should be unsuitable.

All remaining adverse impacts to critical habitats for mule deer, elk, antelope, sage grouse, and sharp-tailed grouse can be mitigated by requiring that the "Wildlife Habitat Replacement Stipulation" (see below) be attached to any future leases.

The quantity of data available is adequate. The quality of data is good.

Results

The following lands are unsuitable because of severe winter range and migration routes for mule deer and elk:

T 8.N., R. 90 W. 6th P.M.
Sec. 1: Lots 5, 6, 7, 8, 9, 10, 11, 12, and 13
Sec. 2: All
Sec. 4: All
Sec. 5: All
Sec. 6: All
Sec. 7: All
Sec. 8: All
Sec. 9: All
Sec. 11: Lots 1-4, 6, 7-10, 14, and 15
Sec. 12: Lots 1, 2, 3, 4, and 5-9
Sec. 13: Lot 1-4, NW¼SW¼
Sec. 14: Lot 1, NE¼, E½SE¼, SW¼SE¼
Sec. 17: All
Sec. 18: All
Sec. 19: All
Sec. 20: All
Sec. 21: All
Sec. 22: Lots 3-6 and 9-16
Sec. 23: Lots 2, 3, 5, 6, and 7

Sec. 24: Lots 1-15
Sec. 25: All
Sec. 26: E½, NE¼SE¼, S½SW¼, Lots 1, 2, 7-11, and 13-16
Sec. 28-33: All
Sec. 35: All

T. 8 N., R. 91 W. 6th P.M.
Sec. 1: All
Sec. 2: All
Sec. 3: All
Sec. 4: All
Sec. 5: All
Sec. 6: All
Sec. 7: All
Sec. 8: All

T. 8. N., R. 91 W., 6th P.M.
Sec. 9: All
Sec. 10: All
Sec. 11: All
Sec. 12: All
Sec. 13: All
Sec. 14: All
Sec. 15: All
Sec. 17: All
Sec. 18: All
Sec. 19: All
Sec. 20: All
Sec. 21: All
Sec. 22: All
Sec. 23: All
Sec. 24: All
Sec. 25: All
Sec. 26: All
Sec. 27: All
Sec. 28: All
Sec. 29: All
Sec. 30: All
Sec. 31: All
Sec. 32: All
Sec. 33: All
Sec. 34: All
Sec. 35: All

Approximately 37,960 acres

The exception was applied to the remaining lands that have been identified as critical habitat for mule deer, elk, antelope, and sage and sharp-tailed grouse. These lands can be adequately protected by the following stipulation:

Wildlife Habitat Replacement Stipulations

The lessee shall be required to mitigate for mule deer, elk, antelope, and sage and sharp-tailed grouse habitat loss where applicable and the resultant loss of displacement of these species, as key indicator species, due to surface coal mining operations. Concurrently with the filing of its mine plan, the lessee shall submit for approval to the Bureau of Land Management, a habitat recovery and replacement plan for protection or enhancement of mule deer, elk, antelope and grouse populations affected by habitat loss or displacement from historical habitat.

The habitat recovery and replacement plan shall be developed in consultation with the Bureau of Land Management and the Colorado Division of Wildlife, based on estimates of lost and disturbed habitat as described in the Green River-Hams Fork Coal Final Environmental Impact Statement. If the mine plan submitted by the lessee indicates figures different from those used in the environmental impact statement as to quality and quantity of habitat lost or disturbed, mitigative alternatives shall be recalculated, based on revised data contained in the mine plan.

The final habitat recovery and replacement plan shall indicate the methods to be employed by the lessee, which will ensure that the carrying capacity of the recovered or replaced land has the capacity to support applicable indicator species as agreed upon by the Bureau of Land Management and the Colorado Division of Wildlife.

Mitigative methods may require the lessee to employ techniques for wildlife range manipulation or intensive wildlife range management. Habitat recovery may not be completely feasible in the permit area; therefore, recovery or replacement may be accomplished on lands made available through the surface management agency, the state or the lessee outside the permit area in combination with recovery and replacement methods on suitable lands within the permit area.

The habitat recovery and replacement plan shall include the following:

1. A habitat analysis of the permit area which:
   a. Identifies the above species that occupy the permit area, and
   b. Includes an analysis of the quality carrying capacity of the habitat for those species.

2. A detailed description of the methods selected by the lessee to mitigate habitat loss, together with a comparative analysis of alternate methods that were considered and rejected by the lessee and the rationale for the decision to select the proposed methods.

   The methods utilized by the lessee for recovery and replacement may include, but are not limited to the following techniques:

   a. Increasing the quantity and quality of forage available to wildlife.
   b. The acquisition of critical wildlife habitats.
   c. Mechanical manipulation of low-quality wildlife to increase its carrying capacity for selected wildlife species.
   d. Recovery, replacement or protection of important wildlife habitat by selected fencing.

3. A timetable giving the periods of time that will be required to accomplish the habitat recovery or replacment plan and showing how this timetable relates to the overall mining plan.

4. An evaluation of the final plan by the Colorado Division of Wildlife. The state shall comment on the methods selected and the techniques to be employed by the lessee and may recommend alternate recovery or replacement methods. If the state has recommended an alternate method, the lessee shall consider the state's recommendation and, if the lessee rejects the state's plan, the lessee shall indicate its reasons are required by provision 2 above. If no state comment is included in the plan, the lessee shall verify its consultation with the state and the plan may be considered without comment.

Consultation

Consultation was carried out with the Colorado Division of Wildlife, which indicated a large portion of the coal planning area is classified as critical habitat for deer, elk, antelope, and grouse. CDOW submitted maps showing the extent of these areas and recommended that if proper mitigative stipulations are used, most of these lands can remain suitable. However, USFWS did request that within townships T. 8 N., R. 90 W. and 91 W. that no more than 10 percent of these townships be leased at any one time, because of the critical habitat and migration routes within the areas.

Criterion 16—Floodplains

> Federal lands in riverine, coastal and special floodplains (100-year recurrence interval) on which the surface management agency determines that mining could not be undertaken without substantial threat of loss of life or property shall be considered unsuitable for all or certain stipulated methods of coal mining.
>
> Exemptions:
>
> This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations or which a permit has been issued.

Analysis

No coastal flood plains exist within the coal planning area. However, riverine and special floodplains exist along many of the drainages in the coal planning area. Flood prone areas where structures exist in or near drainage channels and the channel upstream have been identified as unsuitable. Existing data supplied by the Army Corps of Engineers is inadequate to delineate specifically where all the 100 year floodplains boundaries exist within the planning area. Data collection to specifically delineate all the floodplain boundaries will be done as funding is made available. In any case, specific data collection and boundary delineation will be done before or during activity planning stage for coal leasing.

In those cases where specific data has been collected through previous activity planning, specific lands have been identified as unsuitable.

Results

The 100-year floodplains and those areas encompassing 100 feet adjacent to each bank of the mainstream channels overlying federal coal between the beginning point and ending point of the lands shown in Table A2-6 have been identified as unsuitable.

Those areas inundated by the 100-year flood peak stage in and paralleling the mainstream bottoms, and those areas 100 feet adjacent to each bank of the mainstream channels within the following lands, have been identified as unsuitable:

TABLE A2-6

UNSUITABLE FLOODPLAINS

Floodplain	Beginning Point	Ending Point
Yampa	T. 6 N., R. 85 W. sec. 18, NW1/4NW1/4	T. 6 N., R. 94 W. sec. 19, NW1/4NW1/4
Williams Fork	T. 4 N., R. 88 W. sec. 8, SE1/4SE1/4	T. 6 N., R. 91 W. sec. 36, NE1/4NW1/4
Big Gulch	T. 8 N., R. 92 W. sec. 6, NE1/4SE1/4	T. 7 N., R. 93 W. sec. 22, W1/2
Lay Creek	T. 7 N., R. 93 W sec. 5, NW1/4NW1/4 T. 8 N., R. 93 W. sec. 2, NW1/4NW1/4	T. 7 N., R. 95 W. sec. 31, NW1/4NW1/4 T. 8 N., R. 93 W. sec. 21, N1/2SE1/4
Good Springs Creek	T. 3 N., R. 93 W. sec. 33, SW1/4SE1/4	T. 4 N., R. 93 W. sec. 26, NW1/4SE1/4
Milk Creek	T. 3 N., R. 92 W. sec. 29, SE1/4SE1/4	T. 5 N., R. 92 W. sec. 30, NW1/4NE1/4
Stinking Gulch	T. 4 N., R. 92 W. sec. 36, SW1/4SW1/4	T. 4 N., R. 92 W. sec. 26, SW1/4NE1/4
Sand Creek	T. 4 N., R. 89 W. sec. 36, SE1/4NE1/4	T. 4 N., R. 89 W. sec. 23, SW1/4NE1/4
Sand Spring Gulch	T. 6 N., R. 92 W. sec. 8, SW1/4SW1/4	T. 6 N., R. 93 W. sec. 3, NE1/4SW1/4
North Fork Big Gulch	T. 8 N., R. 92 W sec. 2, NW1/4NW1/4	T. 8 N., R. 92 W. sec. 21, SW1/4NW1/4
Hart Gulch	T. 4 N., R. 90 W. sec. 17, NE1/4SW1/4	T. 4 N., R. 91 W. sec. 25, NE1/4NE1/4
Waddle Creek	T. 3 N., R. 90 W. sec. 3, SE1/4SW1/4	T. 4 N., R. 90 W. sec. 20, SE1/4SW1/4
Deer Creek	T. 3 N., R. 91 W. sec. 12, SE1/4SE1/4	T. 5 N., R. 91 W. sec. 32, SW1/4NE1/4
Morapos Creek	T. 4 N., R. 91 W. sec. 32, SW1/4SE1/4	T. 5 N., R. 91 W. sec. 20, NW1/4SE1/4
Unnamed Creek	T. 5 N., R. 91 W. sec. 33, SE1/4NE1/4	T. 5 N., R. 91W. sec. 28, NE1/4SE1/4
Pine Ridge Gulch	T. 7 N., R. 91 W. sec. 19, NE1/4NW1/4	T. 7 N., R. 91 W. sec. 33, SW1/4SE1/4
Cedar Mountain Gulch	T. 7 N., R. 91 W. sec. 9, SW1/4NW1/4	T. 7 N., R. 91 W. sec. 27, SW1/4SE1/4
South Fork Williams Fork	T. 4 N., R. 89 W. sec. 31, SE1/4SW1/4	T. 4 N., R. 89 W. sec. 19, SW1/4NW1/4
Deacon Gulch	T. 6 N., R. 90 W. sec. 33, SE1/4SE1/4	T. 6 N., R. 90 W. sec. 20, NE1/4SE1/4

TABLE A2-6 (continued)

UNSUITABLE FLOODPLAINS

Floodplain	Beginning Point	Ending Point
Elkhead River	T. 8 N., R. 89 W. sec. 3, NE1/4NW1/4	T. 7 N., R. 89 W. sec. 30, SW1/4NE1/4
Berry Gulch	T. 5 N., R. 89 W. sec. 27, NW1/4NE1/4	T. 5 N., R. 89 W. sec. 30, SW1/4SE1/4
Dry Fork Little Bear Creek	T. 8 N., R. 89 W. sec. 2, NW1/4NW1/4	T. 8 N., R. 89 W. sec. 3, SW1/4NE1/4
Wadell Gulch	T. 8 N., R. 89 W sec. 31, SW1/4SW1/4	T. 8 N., R. 89 W. sec. 33, SE1/4SE1/4
Willow Creek	T. 4 N., R. 88 W. sec. 13, SE1/4SE1/4	T. 4 N., R. 88 W. sec. 20, NW1/4NW1/4
East Fork Williams Fork	T. 4 N., R. 88 W. sec. 32, SE1/4SW1/4	T. 4 N., R. 88 W. sec. 20, NW1/4NW1/4
Dry Creek	T. 5 N., R. 88 W. sec. 20, NW1/4SE1/4	T. 5 N., R. 88 W. sec. 9, NE1/4SE1/4
Fortification Creek	T. 8 N., R. 90 W. sec. 23, SW1/4NW1/4	T. 7 N., R. 91 W. sec. 25, SE1/4NE1/4
Stokes Gulch	T. 5 N., R. 89 W. sec. 8, NW1/4SE1/4	T. 6 N., R. 89 W. sec. 25, SE1/4NE1/4
Dill Gulch	T. 5 N., R. 89 W. sec. 20, SE1/4NE1/4	T. 6 N., R. 88 W. sec. 31, NE1/4NE1/4
Rock Spring Gulch	T. 7 N., R. 89 W. sec. 24, SW1/4NW1/4	T. 7 N., R. 89 W. sec. 25, SE1/4SE1/4
Buck Gulch	T. 7 N., R. 88 W. sec. 20, SE1/4NW1/4	T. 7 N., R. 88 W. sec. 27, NW1/4SW1/4
Morgan Creek	T. 7 N., R. 87 W. sec. 34, NW1/4SE1/4	T. 7 N., R. 88 W. sec. 13, NW1/4NE1/4
Meadow Gulch	T. 7 N., R. 87 W. sec. 25, SE1/4SW1/4	T. 6 N., R. 87 W. sec. 3, NE1/4NE1/4
Butchknife Gulch	T. 6 N., R. 87 W. sec. 1, NW1/4NE1/44	T. 6 N., R. 87 W. sec. 12, NW1/4NE1/4
Little Butchknife Gulch	T. 6 N., R. 86 W. sec. 6, SW1/4NE1/4	T. 6 N., R. 86 W. sec. 7, NW1/4SW1/4
McCrosky Gulch	T. 6 N., R. 86 W. sec. 4, SE1/4NW1/4	T. 6 N., R. 86 W. sec. 9, NE1/4SE1/4
Fish Creek	T. 4 N., R. 87 W. sec. 34, SE1/4SW1/4 T. 5 N., R. 86 W. sec. 20, SW1/4NW1/4	T. 5 N., R. 86 W. sec. 1, NW1/4NE1/4 T. 5 N., R. 87 W. sec. 34, SW1/4SE1/4

Lay Creek

T. 8 N., R. 93 W. 6th P.M.
  Sec. 21: Lots 5, 6, 7, 8
  Sec 22: N½SE¼SW¼
  Sec 32: Lots 1, 4, 6, 10, 15

Those areas inundated by the 100-year flood peak stage in and paralleling the mainstream bottoms and those areas 300 feet adjacent to each bank of the mainstream channels within the following lands have been indentified as unsuitable:

Fish Creek

T. 5 N., R. 87 W. 6th P.M.
  Sec. 34: SE¼
  Sec. 36: NW¼NW¼NW¼

Approximately 5,104 acres.

Criterion 17—Municipal Watersheds

> Federal lands which have been committed by the surface management agency to use as municipal watersheds shall be considered unsuitable.
>
> Exception:
>
> A lease may be issued where the surface management agency in consultation with the municipality (incorporated entity) or the responsible governmental unit determines, as a result of studies, that all or certain stipulated methods of coal mining will not adversely affect the watershed to any significant degree.
>
> Exemptions:
>
> This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

No lands have been committed by the surface management agency to be used as municipal watersheds within the planning area.

The quantity of data available is adequate, and the quality of data is good.

Results

Since no areas have been committed as municipal watersheds no areas are considered unsuitable by application of this criteria.

Criterion 18—National Resource Waters

> Federal lands with National Resource Waters, as identified by states in their water quality management plans, and a buffer zone of federal lands ¼ mile from the outer edge of the far banks of the water, shall be unsuitable.
>
> Exception:
>
> The buffer zone may be eliminated or reduced in size where the surface management agency determines that it is not necessary to protect the National Resource Waters.
>
> Exemptions:
>
> This criterion does not apply to lands: to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Analysis

The Colorado Department of Natural Resources (CDNR) is presently working on the project of identifying National Resource Waters. A portion of their definition of National Resource Waters is that a stream must have perennial or continous flow and be of high quality and capable of supporting trout fisheries. To date, no water courses in the planning area have officially been designated as National Resource Waters in completed water quality management plans. However, some water courses in the planning area may qualify. The quantity of data available is inadequate. The quality of existing data is fair. Further analysis should be done at the coal activity planning stage to identify any water courses that may get officially designated in the future.

Results

No water courses are unsuitable since no designations have been made by the CDNR

Criterion 19—Alluvial Valley Floors

> Federal lands identified by the surface management agency, in consultation with the state in which they are located, as alluvial valley floors according to the definition in 3400.0-5(a) of this title, the standards in 30 CFR Part 822, the final alluvial valley floor guidelines of the Office of Surface Mining Reclamation and Enforcement when published, and approved state programs under the Surface Mining Control and Reclamation Act of 1977, where mining would interrupt, discontinue, or preclude farming, shall be considered unsuitable. Additionally, when mining Federal land outside an alluvial valley floor would materially damage the quantity or quality of water in surface or underground water systems that would supply alluvial valley floors, the land shall be considered unsuitable.
>
> Exemptions:
>
> This criterion does not apply to surface coal mining operations which produced coal in commercial quantities in the year preceding August 3, 1977, or which had obtained a permit to conduct surface coal mining operations.

Analysis

Alluvial valley floors have been identified on 12 drainage basins. The assessment of eight was done using aerial photos, geologic and topographic maps. Major drainage basins on the photos were examined for vegetative types that would indicate subirrigated lands. The estimated area where these alluvial valley floors occurred were delineated to the nearest contour line. The areas identified as unsuitable were not field checked and were delineated to the nearest 20- or 40-foot contour line. Mining of these areas would interrupt and discontinue farming. The remaining four alluvial valley floors were determined by the Colorado Mine Land Reclamation Division or through previous activity planning efforts.

The quantity of data available for the entire coal planning area is inadequate. The quality of existing data used is fair, except in those areas determined by the state. The quality of data used by the state is good.

In addition to these 12 drainages, 12 potential alluvial valley floors have also been identified and listed in Table A2-7 These areas will be looked at in detail during the development of the mine plan or as more data becomes available. These potential alluvial valley floors are also important since they may feed other subsurface aquifers and alluvial valley floors.

Results

The estimated elevations and locations of alluvial valley floors, which have been assessed as unsuitable, are described in Table A2-8

Those areas in and paralleling the mainstream bottoms and those areas encompassing 300 feet adjacent to each bank of the mainstream channels within the following lands are also unsuitable:

Fish Creek

T. 5 N., R. 87 W., 6th P.M.
  Sec. 34: SE¼
  Sec. 36: NW/14NW¼NW¼

Flume Gulch

T. 6 N., R. 90 W., 6th P.M.
  Sec. 19: E½
  Sec. 20: SW¼
  Sec. 29

Foidel Creek

T. 5 N., R. 86 W., 6th P.M.
  Sec. 21: SE¼
  Sec. 28: E½NW¼

TABLE A2-7

POTENTIAL ALLUVIAL VALLEY FLOORS

Locations	Contour Line (ft)
Morgan Gulch	
T. 5 N., R. 93 W., 6th P.M.	
Sec. 5, 8	6080
Sec. 9	6120
Sec. 16	6160
Sec. 21	6200
Sec. 29	6290
Sec. 31	6400
T. 4 N., R. 94 W., 6th P.M.	
Sec. 14	6520
Sec. 13	6480
Sec. 12	6440
Sec. 23	6600
Sec. 22	6640
Willow Creek	
T. 4 N., R. 88 W., 6th P.M.	
Sec. 20	7000
Sec. 21	7080
Sec. 22	7120
Sec. 23	7280
Salt Creek	
T. 4 N., R. 88 W., 6th P.M.	
Sec. 24	7360
Sec. 18, 19	7400
Waddle Creek	
T. 5 N., R. 90 W., 6th P.M.	
Sec. 20	6360
Sec. 29	6480
Sec. 31	6640
T. 4 N., R. 90 W., 6th P.M.	
Sec. 7, 8	6720
Sec. 17	6800-6840
Sec. 20	6980
Sec. 21	7040
Sec. 28	7160
Milk Creek	
T. 5 N., R. 92 W., 6th P.M.	
Sec. 7	6080
Sec. 17, 18, 19	6160
Sec. 19	6200
Sec. 30	6240
T. 4 N., R. 92 W., 6th P.M.	
Sec. 7, 18	6280
Sec. 30	6360
Sec. 31	6400
T. 3 N., R. 92 W., 6th P.M.	
Sec. 5, 6, 8	6440
Dry Creek	
T. 6 N., R. 88 W., 6th P.M.	
Sec. 28	6500
Sec. 34	6600
T. 5 N., R. 88 W., 6th P.M.	
Sec. 4	6650
Sec. 9	6760
South Fork Williams Creek	
T. 4 N., R. 89 W., 6th P.M.	
Sec. 19, 20	6640
Big Gulch	
T. 7 N., R. 93 W., 6th P.M.	
Sec. 17, 19, 20	6240
Sec. 21, 22	6300
Sec. 23	6340
Sec. 24	6370
T. 7 N., R. 92 W., 6th P.M.	
Sec. 19	6400
Sec. 18	6420
Sec. 16, 17	6440
Sec. 16	6460
Sec. 21	6500
Sec. 15	6510-6540
Sec. 3, 11	6580
Sec. 2	6600-6620
Sec. 1	6620-6640
Sec. 10	6560-6580

TABLE A2-7 (continued)

POTENTIAL ALLUVIAL VALLEY FLOORS

Locations	Contour Line (ft)
Lay Creek	
T. 7 N., R. 94 W., 6th P.M.	
Sec. 31	6000-6020
Sec. 32	6020-6060
Sec. 33, 35	6080
Sec. 27, 34	6100
Sec. 26, 35	6110
Sec. 27, 36	6160
T. 7 N., R. 93 W., 6th P.M.	
Sec. 30, 31	6180
Sec. 19	6240
Sec. 7, 18	6260
Sec. 7, 8	6320
Sec. 5, 6	6340
T. 8 N., R. 93 W., 6th P.M.	
Sec. 32	6400
Sec. 33	6420
Sec. 28	6480
Good Spring Creek	
T. 4 N., R. 93 W., 6th P.M.	
Sec. 26	6440
Sec. 35	6520
East Fork Williams Fork River	
T. 4 N., R. 89 W., 6th P.M.	
Sec. 15	6680
Sec. 14	6720
Sec. 13	6840
East Fork Williams Fork	
T. 4 N., R. 89 W., 6th P.M.	
Sec. 15	6880
Sec. 14	6720
Sec. 13	6840
T. 4 N., R. 88 W., 6th P.M.	
Sec. 18	6840-6880
Sec. 17	6880
Sec. 20	7000
Sec. 29	7040
Sec. 32	7080

TABLE A2-8

LOCATIONS AND ESTIMATED ELEVATIONS OF ALLUVIAL VALLEY FLOORS

Locations	Contour Line (ft)
Elkhead River	
T. 7 N., R. 89 W., 6th P.M.	
Sec. 25, 29, 30	6280
Sec. 20, 21	6320
Sec. 20	6360
Sec. 2, 3	6400
Sec. 1, 12	
T. 7 M., R. 88 W., 6th P.M.	
Sec. 5, 6, 7	6440
T. 8 N., R. 88 W., 6th P.M.	
Sec. 32	6480
Sec. 29	6520
Sec. 28, 21	6560
Sec. 16	6620
Sec 17, 18	6680
Sec. 7, 8	6760
Fortification Creek	
T. 7 N., R. 90 W., 6th P.M.	
Sec. 19, 30	6240
Sec. 20	6260
Sec. 17, 21	6270
Sec. 3, 9, 10	6320
Fish Creek	
T. 6 N., R. 86 W., 6th P.M.	
Sec. 36	6600
T. 5 N., R. 86 W., 6th P.M.	
Sec. 1, 2	6600
Sec. 3, 10, 11	6640
Sec. 15, 16	6680
Sec. 17, 19, 20	6720
T. 4 N., R. 87 W., 6th P.M.	
Sec. 11	6920
Sec. 10	7000
Trout Creek	
T. 5 N., R. 85 W., 6th P.M.	
Sec. 6	6640
Sec. 7	6720
Sec. 19	6840
Sec. 30	6920
T. 5 N., R. 86 W., 6th P.M.	
Sec. 1	6600
T. 6 N., R. 86 W., 6th P.M.	
Sec. 24, 25	6560
T. 4 N., R. 86 W., 6th P.M.	
Sec. 12	7080 -7120
Sec. 14	7240
Sec. 23	7320
Sec. 22	7400
Sec. 27	7440
Sec. 28	7520
Sec 33	7580
Good Spring Creek	
T. 4 N., R. 93 W., 6th P.M.	
Sec. 26	6440
Sec. 35	6520
T. 3 N., R, 93 W., 6th P.M.	
Sec. 11	6680
Sec. 14	6760
Williams Fork River	
T. 5 N., R. 91 W., 6th P.M.	
Sec. 6	6160
Sec. 7, 8, 17 20	6240
Sec. 21, 22, 23, 26, 27	6380
Sec. 24	6320
T. 5 N., R. 90 W., 6th P.M.	
Sec. 26, 27	6440
Yampa River	
T. 6 N., R. 94 W., 6th P.M.	
Sec. 15, 17, 18, 23, 27, 36	6000
T. 6 N., R. 93 W., 6th P.M.	
Sec. 21, 30, 31, 32, 33, 34	6040
Sec. 35	6160
T. 5 N., R. 93 W., 6th P.M.	
Sec. 2	6160
Sec. 1	6120
T. 6 N., R. 92 W., 6th P.M.	
Sec. 31	6120
Sec. 36	6160
T. 5 N., R. 92 W., 6th P.M.	
Sec. 1, 2, 3, 5, 6, 7, 8, 9	6120
Sec. 10, 11, 12	6160
T. 6 N., R. 91 W., 6th P.M.	
Sec. 3, 9, 10, 11, 17, 18, 30	6200
T. 7 N., R. 89 W., 6th P.M.	
Sec. 31, 32	6320
T. 6 N., R. 89 W., 6th P.M.	
Sec. 10	6320
T. 6 N., R. 87 W., 6th P.M.	
Sec. 10, 11, 12, 13, 14	6440
T. 6 N., R. 86 W., 6th P.M.	
Sec. 7, 8, 9,	6480
Sec. 10, 11	6520
Sec. 12, 13	6560

Wilson Creek

T. 3 N., R. 93 W., 6th P.M.
Sec. 7: SW¼

T. 4 N., R 93 W., 6th P.M.
Sec. 21
Sec. 22
Sec. 28
Sec. 33: SW¼NW¼

The following list of potiental alluvial valley floors are not unsuitable at this time. Unsuitability determinations on these areas will be deferred until tract delineations are made. Effects of mining or farming in these areas has not been determined. Existing data and time available are not adequate to accurately assess these areas and others not listed as alluvial valley floors, therefore, these areas are only being flagged at this time as potiential alluvial valley floors (see Table A2-7).

Consultation

Consultation was carried out with the Colorado Department of Natural Resources Mined Land Reclamation Division, WHich is in general agreement with the mapping along Trout Creek and Fish Creek. A portion of Foidel Creek, Wilson Creek and Flume Gulch were identified as AVFs. Determinations have not been made for Hayden Gulch. However, this does not preclude them from future determination as AVFs (see Exhibit B).

Multiple-Use Tradeoffs (Screen 3)

The multiple-use tradeoffs were applied as a part of the Resource Management Plan Alternative development. Each alternative establishes priority uses for various resources that reflect the multiple-use tradeoffs that have been made within the coal planning area. The areas identified as a priority use for resources other than minerals and that specifically excluded coal development involving surface disturbance have been removed from further coal leasing consideration. Table A2-1 also displays the results of making multiple use tradeoffs and which resources excluded coal development involving surface disturbance.

Surface Owner Consultation (Screen 4)

The Bureau of Land Management has the responsibility to consult with surface owners and other surface management agencies when they are involved in or affected by coal management actions.

This consultation provides qualified surface owners whose lands overlie federal coal deposits an opportunity to express their views for or against surface mining. All surface owners affected by this planning effort were consulted. After researching court house records to identify affected surface owners, they were screened for qualifications where enough information existed. The surface owners where inadequate information existed to determine qualifications were requested to qualify or disqualify themselves as a qualified surface owner based on three criteria:

1. Hold legal or equitable title to the surface or split-estate lands.
2. Have their principal place of residence on the land, or personally conduct farming or ranching operation on the area under consideration, or receive directly a significant portion of their income from such farming or ranching operation.
3. Have not previously granted written consent to any party to mine by other than underground mining techniques.

If they were a qualified surface owner, they were asked to express their views on surface mining federally owned coal under their surface.

The mailing was sent on March 8, 1984, to approximately 758 surface owners, and 77 letters were returned as undeliverable. The number of undeliverable letters was reduced to 44, or 6 percent of the total, by a second mailing on April 26, 1984. Of the 44 letters returned by the Post Office, 18 were unclaimed by landowners, 6 landowners were deceased, and 20 landowners moved and left no forwarding address. Three letters or return receipts are assumed to have been lost in the mail.

The undeliverable letters were not used in compiling statistics. Landowners who acknowledged receipt of the letter but did not respond are assumed to be for surface mining. The responses and any comments have been reviewed and will be considered throughout the planning process.

A map was prepared that depicts the lands identified by surface owners against surface mining. This map is included as Map A2-3. The results of the consultation process are summarized in the Table A2-9.

TABLE A2-9

SUMMARY OF SURFACE OWNER CONSULTATION

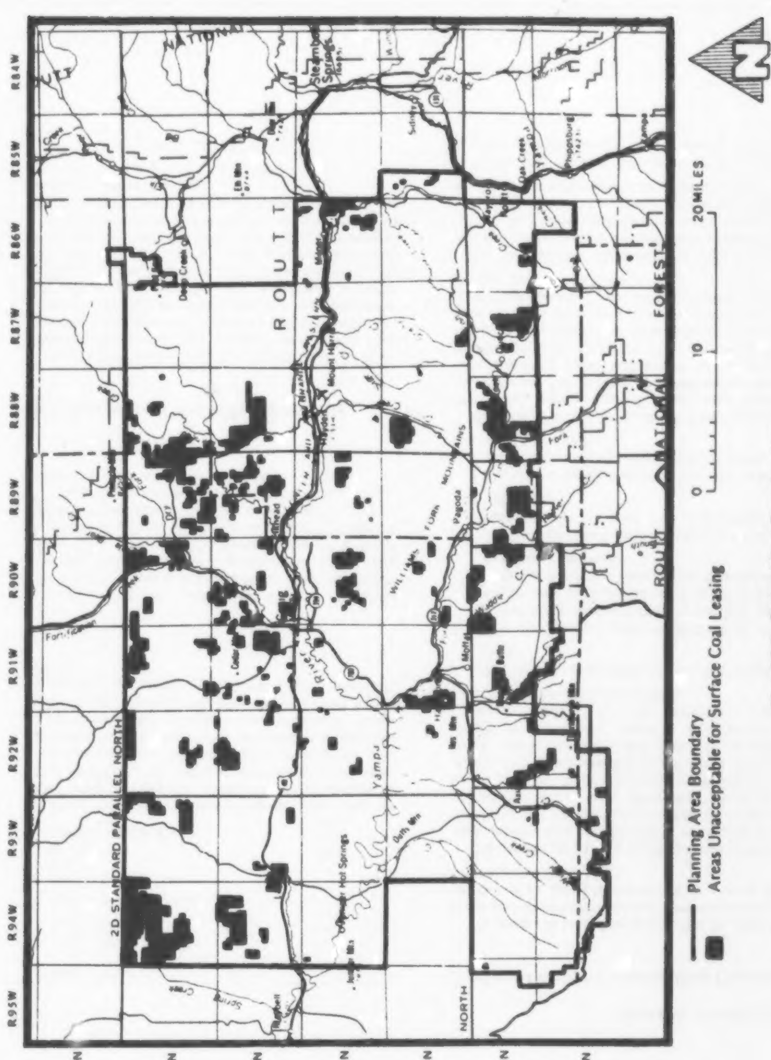
Numbers		Percentage of Landowners Notified
436	Landowners who acknowledged receipt of letter	61
207	Landowners responding for surface mining	29.1
179	Landowners responding against surface mining	25.2
50	Landowners responding that a/c non-qualified	7.0
275	Landowners assumed to be for by non-response	38.7
532	Total for (includes non-qualified)	74.8
179	Total against surface mining	25.2

An estimated 400 landowners whose lands are in developed subdivisions were not contacted because these lands were identified as unsuitable under Criterion 3.

Management Decision

The management decision concerning the results of surface owner consultation is that all lands (68,808 acres) where qualified surface owners objected to coal leasing will be unacceptable for further leasing consideration and/or exchange for surface mining methods.

Areas identified as unacceptable for surface mining are based on strong objections expressed by the surface owners. Pursuant to 43 CFR 3427, written consent is required to include split estate lands in a lease sale to be mined by surface mining methods. The preference of qualified surface owners expressed through consultation is assumed to give a indication of whether a qualified surface owner would provide the consent necessary during the leasing process. The inability to obtain future consent would make it impractical to consider these areas as suitable for further leasing consideration for other than subsurface mining methods. Activity planning efforts to delineate lease tracts on split-estate lands would not be adequately justified in those areas where qualified surface owners objected through the consultation process. The areas directly adjacent to existing leases and tracts proposed under the Green River-Hams Fork Round II Draft EIS do not show a significant number of surface owner objections to inhibit leasing within the life of this land use plan. These are the coal areas of high interest for future leasing and future demand is expected to be concentrated around these existing leases and tracts. The largest areas where surface owners objected are concentrated in areas of lower leasing interest levels. Demand for leasing in these areas, within the life of this land-use plan, is not expected to be significant. The lands that will not receive further leasing consideration as a result of this surface owner consultation only represent 10 percent of the coal planning area. Adequate alternative areas remain available for leasing involving surface mining methods through the life of this plan.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T7N
T6N
T5N
T4N
T3N
ROUTT
NATIONAL
FOREST
2D STANDARD PARALLEL NORTH
NORTH
Steamboat Springs
Yampa
River
Craig
Hayden
Milner
Oak Creek
Phippsburg
Toponas
Deep Creek
Williams Fork Mountains
Pagoda
Juniper Hot Springs
Maybell
Elk Fork
Fortification
Spring Creek
0
10
20 MILES
N
Planning Area Boundary
Areas Unacceptable for Surface Coal Leasing

Map A2-3. Federal Coal Planning Area
Surface Owner Consultation Results

EXHIBIT A

WRITTEN FINDING ON CRITERION 3

CRITERION 3

Exception 3 - Public Notice

United States Department of Interior
Bureau of Land Management

Unsuitability of Public Roads for Surface Coal Mining Operations in Portions of Moffat and Routt Counties Colorado

The Bureau of Land Management, Craig District, has begun preparing a resource management plan for BLM lands in the Little Snake Resource Area. This plan will guide and control management actions for the next several years. One part of this planning process is a review of federally owned coal within portions of the resource area, including application of the coal unsuitability criteria (Federal Coal Management Regulations, 43 CFR 3461).

Criterion number 3 states that lands within 100 feet of the outside line of a right-of-way of a public road shall be considered unsuitable for surface coal mining operations. However, Criterion 3 has an exception, 43 CFR 3461.1 (c)(2)(iii), which states that a coal lease may be issued "if after public notice and opportunity for public hearing in the locality, written finding is made by the authorized office that the interest of the public and the landowners affected by mining within 100 feet of a public road will be protected." This criterion and exception apply only to the coal study area portion of the resource area.

The purpose of this notice is to provide any interested party an opportunity to request a public hearing or to submit comments on the above matters. Comments or requests for a public hearing must be submitted within 30 days of the date of this notice. After the 30-day comment period and/or public hearing, the authorized officer will determine which public roads the exception applies to. Information gained through the notice will be used in making the determination.

Interested parties may submit comments or questions to Ms. Carol MacDonald, Team Leader, Bureau of Land Management, Little Snake Resource Area, 1280 Industrial Avenue, Craig, Colorado 81625, telephone (303)824-4441.

Further information, including maps and legal descriptions of the coal planning area, is available at the Little Snake Resource Area Office at the above address. Business hours are from 7:45 a.m. to 12:00 noon and from 12:45 p.m. to 4:30 p.m.

Published in the *NW Colorado Daily Press* June 15, 1984.

DECISION

As a result of the public notice and opportunity for public hearing, it has been determined that exception 3 to criterion 3 [43 CFR 3461.1(c)(2)(iii)] will apply to all public roads within the coal planning area.

After the 30-day comment period, no requests for a public hearing were made. Past coal mining activities have not resulted in adverse effects on the public or those landowners affected by mining within 100 feet of a public road. Therefore, the interests of the public and the landowners affected by mining within 100 feet of a public road will be protected.

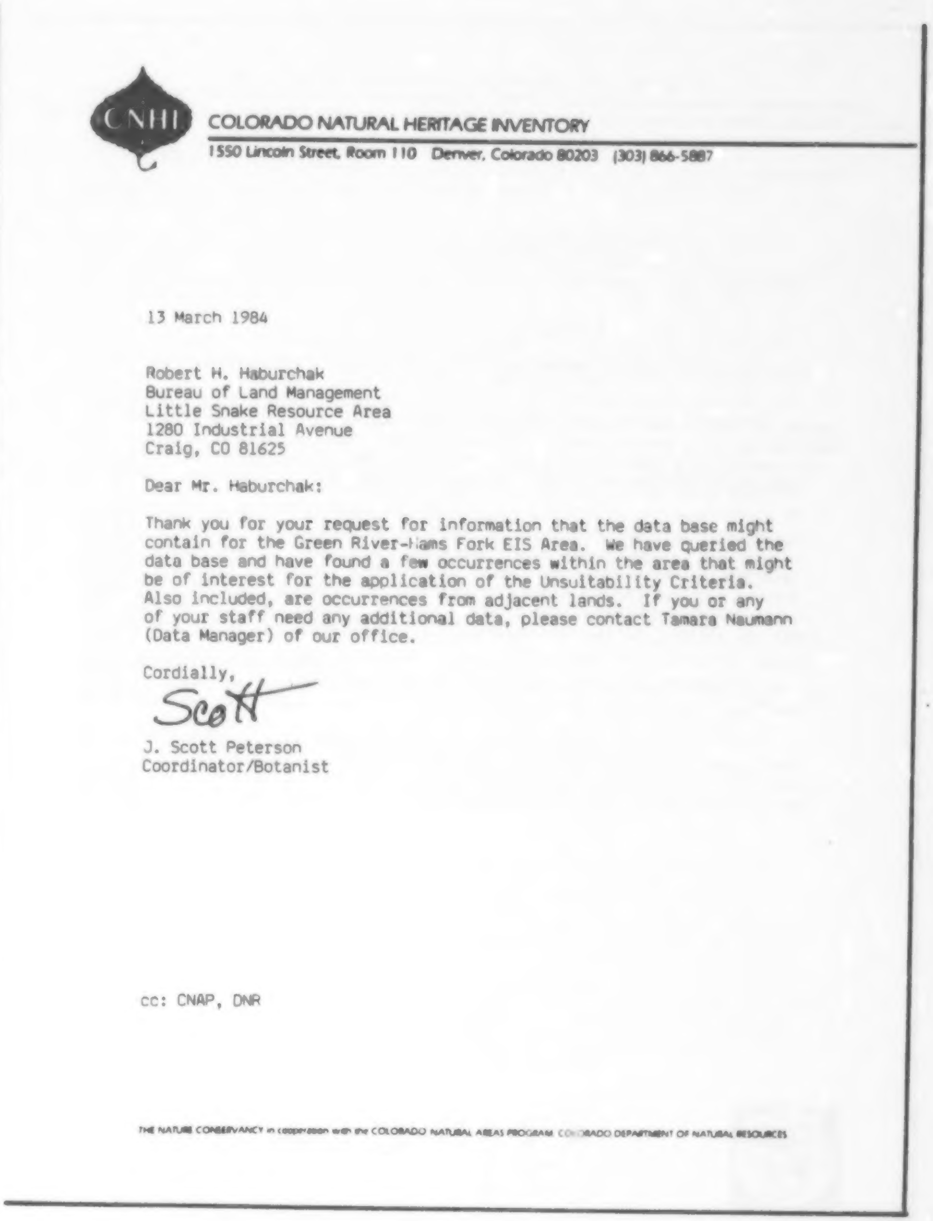
Recommended By: 2/14/85
District Manager Date

Approved By: 2/20/85
State Director Date

pages tightly bound

EXHIBIT B

CONSULTATION LETTERS



COLORADO NATURAL HERITAGE INVENTORY
1550 Lincoln Street, Room 110 Denver, Colorado 80203 (303) 866-5887

13 March 1984

Robert H. Haburchak
Bureau of Land Management
Little Snake Resource Area
1280 Industrial Avenue
Craig, CO 81625

Dear Mr. Haburchak:

Thank you for your request for information that the data base might contain for the Green River-Hams Fork EIS Area. We have queried the data base and have found a few occurrences within the area that might be of interest for the application of the Unsuitability Criteria. Also included, are occurrences from adjacent lands. If you or any of your staff need any additional data, please contact Tamara Naumann (Data Manager) of our office.

Cordially,

Scott

J. Scott Peterson
Coordinator/Botanist

cc: CNAP, DNR

THE NATURE CONSERVANCY in cooperation with the COLORADO NATURAL AREAS PROGRAM, COLORADO DEPARTMENT OF NATURAL RESOURCES

best copy available

COLORADO
HISTORICAL
SOCIETY

The Colorado Heritage Center 1300 Broadway Denver, Colorado 80203

RECEIVED
Bureau of
Land Management
MAR 19 1984
CRAIG
DISTRICT OFFICE

March 14, 1984

Lee Carie
District Manager
Bureau of Land Management
455 Emerson Street
Craig, Colorado 81625

Dear Mr. Carie:

Enclosed please find the site forms for those eligible cultural resources that are located in the project area as outlined in your March 9, 1984 correspondence. These sites were consensus determinations of eligibility between the Bureau of Land Management and the Office of Surface Mining. To our knowledge only these sites in our inventory meet the coal unsuitability criterion number 7.

If this office can be of further assistance, please contact Jim Green at 866-3394.

Sincerely,

Barbara Sudler

Barbara Sudler
State Historic Preservation Officer

BS/WJG:ss

Enclosure

STATE OF COLORADO
Richard D. Lamm, Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
James B. Ruch, Director
6060 Broadway
Denver, Colorado 80216 (297-1192)
711 Independent Avenue
Grand Junction, CO 81505

May 7, 1984

Lee Carie, District Manager
Bureau of Land Management
455 Emerson Street
Craig, CO 81625

Dear Lee:

My staff has reviewed the wildlife information for the coal planning area to be addressed in the Little Snake Resource Management Plan. Specifically we looked at the wildlife data to determine whether unsuitability criteria 10 and 15 may be applied to any of the lands within the planning area.

We do not feel that any of the area is unsuitable under criteria 10. The greater sandhill crane does occur within the coal planning area but with stipulations its habitat needs can be protected.

A large portion of the planning area is classified as critical habitat for deer, elk, antelope and sage grouse. We have prepared maps showing the extent of the important biological features for these species and are supplying them to your staff. Sharptail grouse are a species of concern but mapping is not complete. We will supply maps as they become available. Even though much of the unit is classified as critical habitat we feel that with proper mitigation stipulations it does not need to be designated as unsuitable.

There are two townships, T8N, R90W and R91W that should be considered for some unsuitability designation. They are critical habitats for deer and elk and also very important migration areas. What we propose is that no more than 10% of these two townships be leased at any one time. This would permit some mining but would also protect this migration route.

If you have any questions concerning this matter please contact me or Jim Morris.

Sincerely,

Perry D. Olson

Perry D. Olson
NW Regional Manager

PDO:JM:ch

xc: Ellenberger, Grode, File

DEPARTMENT OF NATURAL RESOURCES, David H. Getches, Executive Director • WILDLIFE COMMISSION, James C. Kennedy, Chairman
Timothy W. Schultz, Vice Chairman • Michael K. Higbee, Secretary • Richard L. Divelbiss, Member • Donald A. Fernandez, Member
Wilbur L. Redden, Member • James T. Smith, Member • Jean K. Tool, Member

U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
COLORADO FIELD OFFICE (HR)
730 SIMMS STREET, SUITE 292
GOLDEN, COLORADO 80401

May 21, 1984

MEMORANDUM

To: Area Manager, Little Snake Resource Area

From: Assistant Field Supervisor - Colorado

Subject: Application of Unsuitability Criteria (43 CFR 3461) on Coal Planning Area of the Little Snake Resource Area, Colorado.

This letter is in reference to your letter dated April 6, 1984 and a meeting held on May 7, 1984, when Rick Krueger, (FWS), met with Herb Conley (BLM), and Jim Morris of the Colorado Division of Wildlife (CDOW) to discuss the unsuitability analysis for the Little Snake Resource Management Plan(RMP). The CDOW and our Grand Junction office provided Mr. Conley with maps showing wildlife use throughout the resource area. These maps depicted important use areas for deer, elk, antelope, sage grouse and raptors. The CDOW discussed big game and sage grouse distributions and is providing a letter outlining their concerns. The following comments are intended to both summarize the discussions and provide our recommendations concerning the LUM application.

Because of the large number of nests, the buffer zones indicated on the area maps we provided were drawn with a 1/4 mile radius. We believe that a buffer of one-half mile is more appropriate for preliminary planning purposes on Criteria 11, 12, 13 and 14.

In future site-specific application of exceptions, these buffers could be modified based upon topography, habitats/ biological needs and proposed surface activities. Recognizing the magnitude of this effort and the staffing limitations within our respective agencies, we recommend that the areas with the highest probability of leasing and/or leasing conflicts be identified so we may begin consultation.

Other specific comments on the initial application of individual criterion are as follows:

Criterion 9. Under separate letter from the Salt Lake City Endangered Species office, you will be receiving a list of candidate and listed threatened and endangered species found within the designated area.

Criterion 10. We suggest that you contact Scott Peterson of the Colorado Natural Heritage Inventory for a list of State T&E plant species which might be found in the area. His address can be found below.

Criterion 11. We provided a map showing the locations of known active and inactive golden eagle nests from surveys flown over the past three years. The 1/2 mile buffer zone could include a seasonal stipulation which would allow for surface occupancy but would not permit surface disturbance from July 1 till February 15.

Criterion 12. Bald eagles roost primarily along the major river drainages and wetlands. Some well known sites have been outlined on a map provided by CDOW. In addition, we are aware of an active bald roost on Milk Creek in the southwest quarter of Section 17 and the northwest quarter of Section 10, Township 3 North, Range 92 west. This roost site should be added to the provided map. Because of the importance of riparian habitats to bald eagles and other migratory birds of high federal interest, a 1/2 mile buffer should be declared unsuitable for surface disturbance and occupancy along each side of all riparian corridors and wetlands. As time permits, this buffer may be adjusted based upon site specific information of habitats, use and proposed activities.

Criterion 13. All known prairie falcon nests were delineated on the maps provided. We are unaware of any peregrine eyries in the resource area. Buffer zones could also include a seasonal stipulation which would provide for surface occupancy but would not allow surface disturbance from July 1 to March 15.

Criterion 14. Most of the species of high federal interest in the Green River Hams Fork occupy riparian or wetland areas. These species include canvasback, Sandhill crane, long-billed curlew, bald eagle, back-crowned night heron, great blue heron, osprey and black tern. These areas should be protected by the same buffer identified for Criteria 12. The known ferruginous hawk nest sites and a one-half mile buffer zone should also be declared unsuitable. These nest sites are depicted on the raptor maps provided by our office. A seasonal stipulation that would allow surface occupancy but would not allow surface disturbance between July 15 and March 1 could also be established for ferruginous hawks.

We appreciate the opportunity to provide this information on the development of unsuitability criteria for coal planning in the Little Snake RMP. If you have any questions concerning our comments, please contact Rick Krueger at our Grand Junction office (303/243-2778).

L. Ronel Finley

cc: CDOW, Grand Junction
FWS/HR, Denver; Grand Junction
Colorado Natural Heritage Inventory
ATTN: Scott Peterson
1550 Lincoln Street, Room 110
Denver, CO 80203

1420
1601

September 20, 1984

Mr. Ronel Finley
U.S. Fish and Wildlife Service
730 Simms Avenue, Room 292
Denver, Colorado 80225

Dear Ronel:

This is to formally establish the results of our meeting with you and Mike Lockhart on August 23, 1984, concerning application of coal unsuitability criteria 11 (golden eagle nests), 13 (prairie falcon nests), and 14 (ferruginous hawk nests). Application of these criteria will be made during development of the Little Snake Resource Management plan (RMP).

For the Little Snake RMP, identified nests under all three criteria will be assessed "unsuitable pending site-specific application of all exceptions at tract delineation time." Given the large size of the coal planning area and the large number of identified nests, it was agreed that it is premature to attempt application of exceptions now. When more limited areas for potential leasing are defined at tract delineation time, the Fish and Wildlife Service and Bureau of Land Management will field review specific nests to determine whether they should continue to be considered unsuitable and what protection/mitigation measures are appropriate.

With respect to Green River-Hams Fork Round 2 coal tracts, the Craig District will, in the near future, provide the Fish and Wildlife Service with a list of nests in delineated tracts to be evaluated on a site-specific basis for application of exceptions.

We appreciate your continuing participation and look forward to working with the U.S. Fish and Wildlife Service during future development of these programs.

Sincerely yours,

Assistant Area Manager

CC: Mike Lockhart, USFWS, Grand Junction

Richard D. Lamm
Governor

DEPARTMENT OF NATURAL RESOURCES
David H. Getches, Executive Director
MINED LAND RECLAMATION DIVISION
DAVID C. SHELTON, Director

December 7, 1984

Ms. Carol A. MacDonald
Little Shale RMP
1280 Industrial Avenue
Craig, CO 81625

Dear Ms. MacDonald:

At your request, we have completed our review of your preliminary alluvial valley floor (AVF) identification. Following is a summary of our findings. It is important to note here that our AVF determinations are very specific to the locations of coal mining activity. The study areas for our determinations are delineated by the nature of impacts of a particular operation. As a rule of thumb, our hydrologic adjacent area is within a two mile radius of the permit boundary. Those areas that we have not made determinations for are by no means precluded from such a determination in the future.

We are in general agreement with your mapping along Trout Creek and Fish Creek. There is also a length of Foidel Creek which is on federal land and which has been identified as an AVF. We have marked the location in Sect. 21 and 28, T5N, R86W.

No determinations have been made for the areas you indicate along Hayden Gulch. It is possible that portions of Hayden Gulch draining to the Williams Fork are in irrigated agriculture. However, one of the requirements for an AVF determination is the presence of a channel, and there is no obvious channel adjacent to the operation.

The only AVF identified along the Williams Fork is in Section 7, T5N, R91W. No determinations have been made for your locations along the remainder of the Williams Fork, East Fork of the Williams Fork, Williams Creek or Waddle Creek. Nor have AVF's been identified along Elkhead or Fortification Creeks.

The only portions of the Yampa River which we have identified as AVF's are located in Sections 11 and 14 of T6N, R87W; Sections 1, 2, 3, 5, 8, 9, 10, 11 and 12 of T5N, R92W; Sections 9, 10 and 17 of T6N, R91W and Section 36 of T6N, R92W. Although there probably are AVF's along other portions of the Yampa, we have not identified them during any permit application review.

We have made no determinations for Milk Creek or Morgan Gulch. The portions of Lay Creek indicated are currently being reviewed in conjunction with the Sugarloaf permit application, but no determination has been made.

423 Centennial Building, 1313 Sherman Street Denver, Colorado 80203 Tel. (303) 866-3567

We have determined that AVF's exist along Wilson Creek in Sections 5, 7 and 8 of T3N, R93W and Sections 14, 15, 21, 22, 28, 32 and 33 of T4N, R93W. You did not identify these. We agree with your determination for Good Spring Creek in Sections 2, 11 and 14 of T3N, R93W and Sections 26 and 35 of T4N, R93W.

Another location you may have missed is along the reach of Flume Gulch in T6N, R90W. We have determined this to be an AVF.

I believe this covers all of the areas you have identified, plus some additional ones. If you have any questions regarding this information, please contact me. I would appreciate some feedback regarding the degree to which this response assists you in your process.

Sincerely,

Brian E. Munson

Brian E. Munson
Senior Reclamation Specialist

BEM/mad

cc: Fred Banta

Doc. No. 5815

APPENDIX 3

PARCELS OF LAND THAT MEET THE DISPOSAL CRITERIA OF FLPMA AND ARE SUITABLE FOR ALL FORMS OF LAND TENURE ADJUSTMENT

Sixth Principal Meridian

T.1N., R.84W., Sec.4: SE¼NE¼, 40 acres

T.3N., R.84W., Sec.3: Lot 13, 43.21 acres

T.7N., R.84W., Sec.33: SE¼NE¼, 40 acres

T.1N., R.85W., Sec.7: Lots 1,2,E½NW¼, 153.27 acres

T.2N., R.85W., Sec.9: W½SW¼. 80 acres

T.2N., R.85W.,
  Sec.24: S½SW¼, SW¼SE¼;
  Sec.25: NW¼NE¼, NE¼NW¼, 200 acres

T.2N., R.85W.,
  Sec.35: S½N½, NE¼NW¼, N½SW¼,
  280 acres

T.3N., R.85W., Sec.10: Lot 12, 43.21 acres

T.3N., R.85W., Sec.13: Lot 1, 42.41 acres

T.3N., R.85W., Sec.17: Lot 4, 41.33 acres

T.3N., R.85W., Sec.19: Lots 13, 14, 83.51 acres

T.4N., R.85W.,
  Sec.11: Lot 9;
  Sec.14: Lot 2. 80.69 acres

T.5N., R.85W., Sec.11: Lot 1, 26.06 acres

T.7N., R.85W., Sec.17: W½NE¼, 80 acres

T.8N., R.85W., Sec.7: Lot 7, 8.06 acres

T.8N., R.85W., Sec.7: Lot 11, 8.65 acres

T.8N., R.85W., Sec.16: Lots 4, 5, 7.51 acres

T.7N., R.86W.,
  Sec.20: SE¼SW¼;
  Sec.29: E½NW¼, 120 acres

T.8N., R.86W., Sec.1: Lot 7, 50.77 acres

T.8N., R.86W., Sec.2: Lots 5, 6, 98.70 acres

T.8N., R.86W., Sec.10: Lot 6, 11.58 acres

T.8N., R.86W., Sec.15: Lot 5, 7.56 acres

T.8N., R.86W., Sec.26: Lot 1, 14.80 acres

Sixth Principal Meridian

T.1N., R.84W., Sec.10: W½SE¼SW¼, 20 acres

T.6N., R.84W., Sec.10: SE¼NE¼, 40 acres

T.6N., R.84W., Sec.27: SE¼SE¼, 40 acres

T.7N., R.84W.,
  Sec.29: W½W½;
  Sec.30: E½NE¼, 240 acres

T.2N., R.85W., Sec.4: Lots 1, 2, S½NE¼,

T.3N., R.85W., Sec.33: Lot 12, 119.06 acres

T.2N., R.85W., Sec.23: E½NE¼, 80 acres

T.3N., R.85W.,
  Sec. 1: Lots 10,11;
  Sec. 2: Lots 5 to 8, inclusive;
  Sec.11: Lots 1, 2, 4, 5;
  Sec.12: Lots 3 to 6, inclusive, Lots 11 to 14, inclusive,
    736.42 acres

T.8N., R.85W.,
  Sec.5: Lots 5 to 8, inclusive;
  Sec.6: Lots 8 to 16, inclusive, S½NE¼,
    SE¼NW¼, NE¼SW¼, N½SE¼, SE¼SE¼,
    756.71 acres

T.8N., R.85W.,
  Sec.9: Lots 1 to 4, inclusive, E½SE¼,
    SW¼SE¼, 266.28 acres

T.7N., R.86W.,
  Sec.2: Lot 7, 3.79 acres

T.7N., R.86W.,
  Sec. 3: Lot 10;
  Sec.10: Lot 1, 8.69 acres

T.7N., R.86W.,
  Sec.6: Lot 8;
  Sec.7: Lot 6; 226.48 acres

T.7N., R.86W.,
  Sec.8: Lot 1, 7.48 acres

APPENDIX 3

T.7N., R.85W.,
Sec.18: Lots 1 to 4, inclusive,
W½E½,E½W½;
Sec.19: Lots 1 to 3, inclusive, 551.93 acres

T.7N., R.86W.,
Sec.12: Lots 1 to 4, inclusive;
Sec.13: Lots 1 to 4, inclusive, W½E½;
Sec.24: Lots 1 to 4, inclusive, lot 11, W½NE¼;
Sec.25: Lot 1. 714.13 acres

T.7N., R.86W.,
Sec.16: Lots 1 to 4, inclusive;
Sec.17: Lot 7, SE¼;
Sec.20: NE¼;
Sec.21: N½;
Sec.22: Lots 1 to 5, inclusive,S½NW¼,
N½SW¼, 940.15 acres

T.7N., R.86W.,
Sec.18: Lot 10, 6.55 acres

T.7N., R.86W.,
Sec.18: Lot 6,

T.7N., R.87W.,
Sec.13: Lot 1, 40.03 acres

T.8N., R.86W.,
Sec.19: Lots 9 to 15, inclusive;
Sec.30: Lots 5,6, 183.54 acres

T.8N., R.86W.,
Sec.27: Lots 1, 2, 46.44 acres

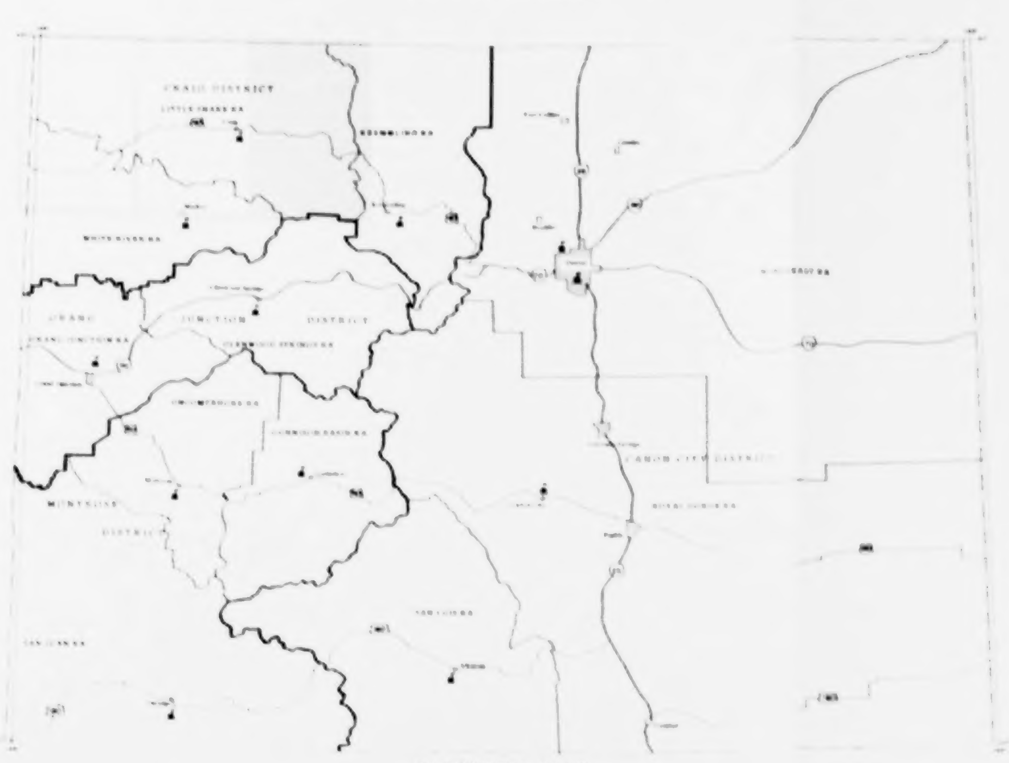
T.8N., R.86W.,
Sec.34: Lot 9;
Sec.35: Lots 3, 4, 53.48 acres

The areas described aggregate 6642.48 acres

☆ U.S. GOVERNMENT PRINTING OFFICE: 1989—673-223/00,104 REGION NO. 8

L 72/3/record

STATE OF COLORADO



VICINITY MAP

LAND STATUS LEGEND

☐	Public Lands (Administered by Bureau of Land Management)	☐	Colorado Division of Wildlife Lands
☐	National Forest Lands	☐	Private Lands
☐	Colorado State Lands	☐	Bureau of Reclamation Lands
		▨	Resource Area Boundary

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LITTLE SNAKE RESOURCE AREA TRANSPORTATION SYSTEM*

Federal and State Highways	
County Roads	(10)
**B.L.M. Roads and Trails	NONE
Other Federal Roads and Trails	
† Private Roads and Trails	NONE

* Only the color coded roads are part of the B.L.M. Transportation System. All other roads may exist but ownership status is not shown, nor is public use guaranteed.

** Bureau roads are for use, development, protection, and administration of public lands and resources. Although administered by a public agency, and generally open to use by the public, they are not public roads.

† Permission of landowner required for access.

Management Unit Legend

M.U. 1	Eastern Yampa River	M.U. 11B	Cedar Mountain
M.U. 2	Northern Central	M.U. 11C	Wild Mountain
M.U. 3	Little Snake River	M.U. 12	Vermillion
M.U. 4	Eastern Foothills	M.U. 13A	Limestone Ridge
M.U. 5	Douglas Mountain	M.U. 13B	Irish Canyon
M.U. 6	Northern Great Divide	M.U. 13C	Lookout Mountain
M.U. 7	Scattered Sands	M.U. 13D	Cross Mountain Canyon
M.U. 8	Axial Basin	M.U. 14	Middle Mountain
M.U. 9	Cold Springs	M.U. 15	Cross Mountain Foothills
M.U. 10A	Cross Mountain	M.U. 16	West Red Wash
M.U. 10B	Diamond Breaks	M.U. 17	Willow Creek
M.U. 11A	Little Yampa/Juniper Canyon		

MAP LEGEND CODES
FOR OFF-ROAD VEHICLE DESIGNATIONS

(C)	Closed
(L)	Limited
(L) 1	Existing Roads and Trails
(L) 2	Designated Roads and Trails

RMP USER NOTE

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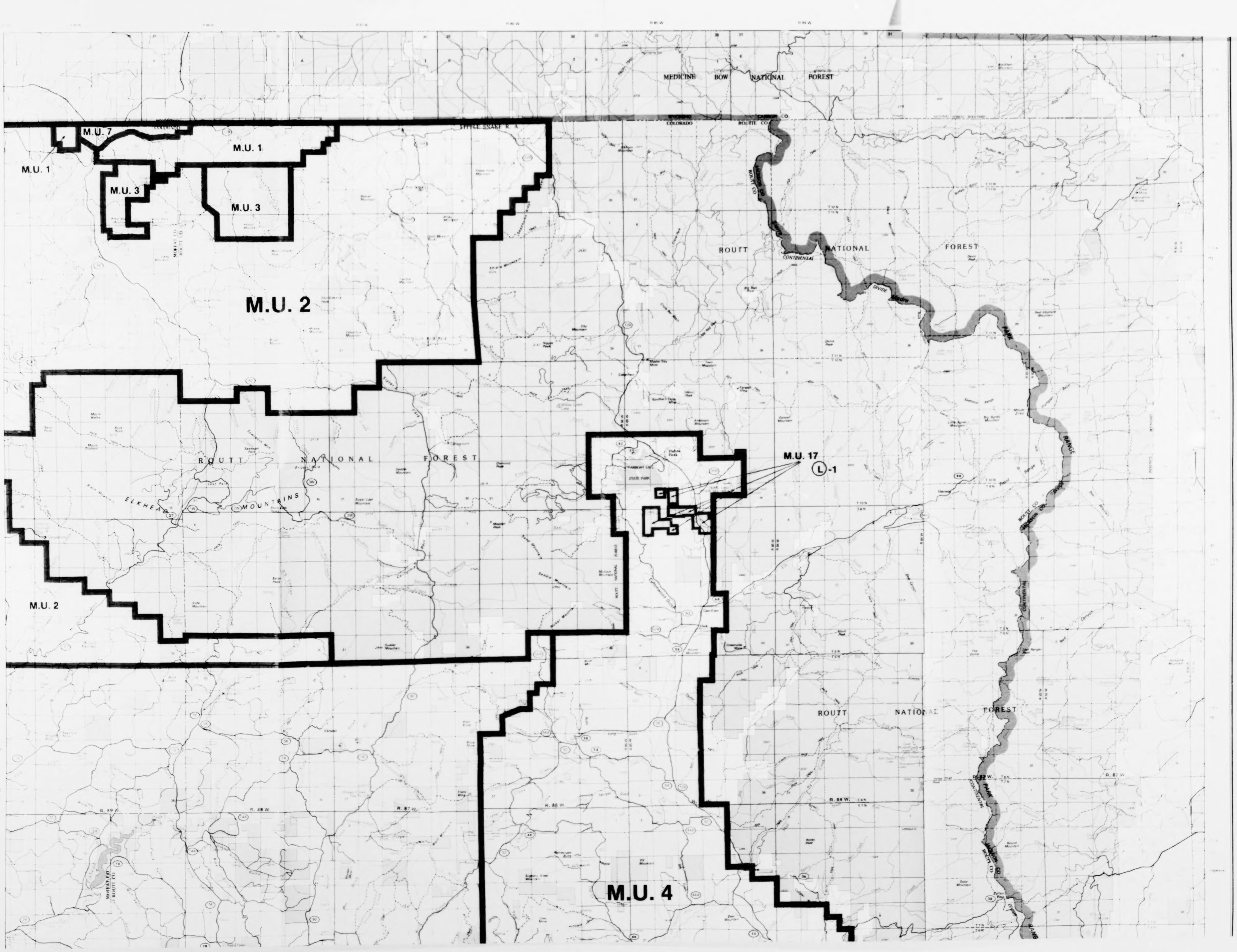
Planimetric Map Symbols

Primary highway, hard surface
Secondary highway, hard surface
Light duty road, principal street, hard or improved surface
Other road or street, trail
Route marker: Interstate, U.S., State
Railroad: standard gage, narrow gage
Bridge, overpass, underpass
Tunnel: road, railroad
Built up area, locality, elevation
Airport, landing field, landing strip
National boundary
State boundary
County boundary
National or State reservation boundary
Land grant boundary
U.S. public lands survey: range, township, section
Range, township, section line: protracted
Power transmission line, pipeline
Dam, dam with lock
Cemetery, building
Windmill, water well, spring
Mine shaft, adit or cave, mine, quarry, gravel pit
Campground, picnic area, U.S. location monument
Ruins, cliff dwelling
Stream, lake: perennial, intermittent
Rapids, large and small, falls, large and small
Area to be submerged, marsh, swamp
Land subject to controlled inundation, woodland

Produced by
Department of the Interior
Bureau of Land Management
Colorado State Office
GIS Unit
2850 Youngfield Street
Lakewood, CO 80215

Craig District Office
455 Emerson St., P.O. Box 248
Craig, CO 81625

Little Snake Resource Area
1280 Industrial Ave.
Craig, CO 81625



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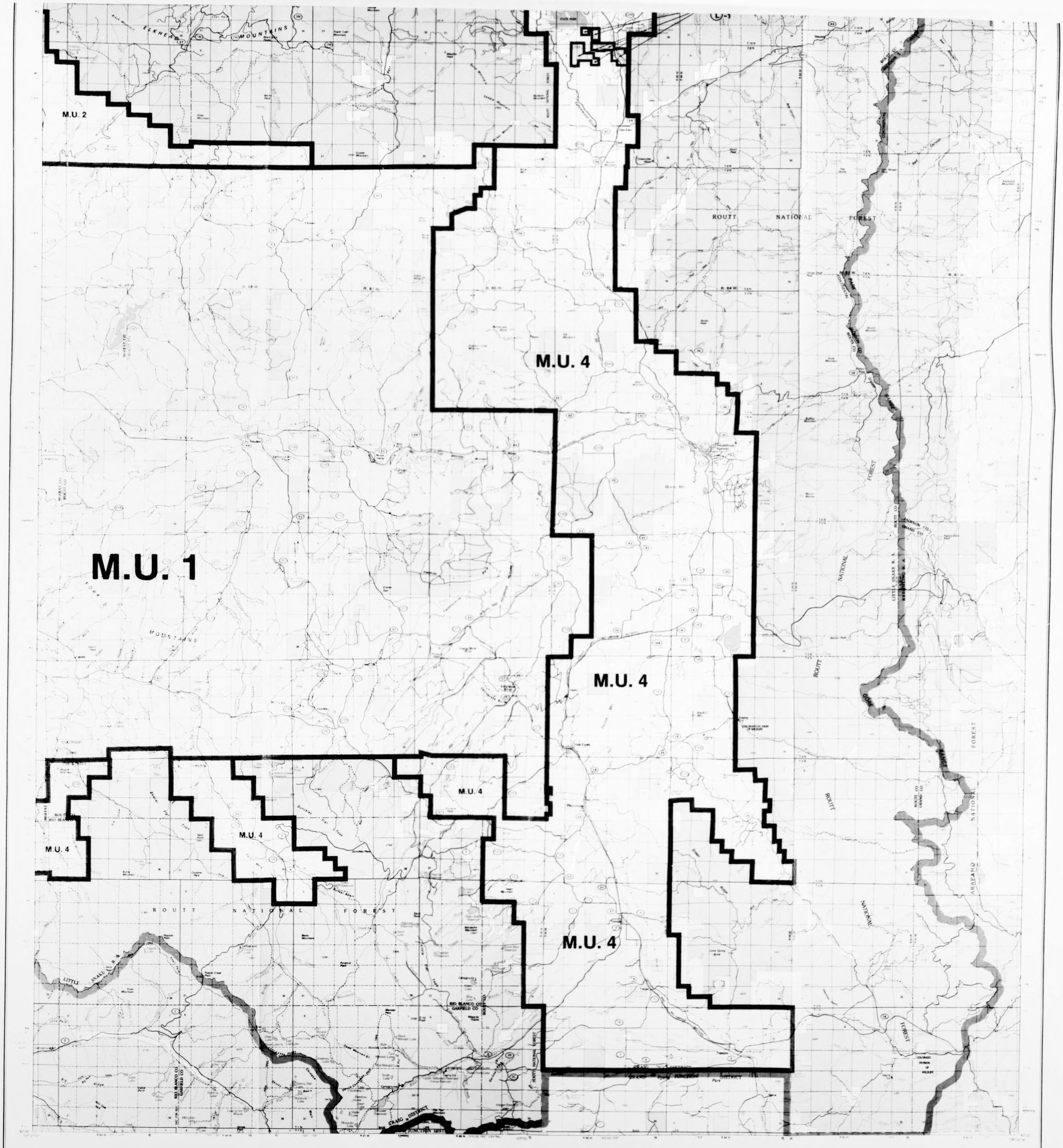
ELKHEAD MOUNTAINS
M.U. 2
ROUTT NATIONAL FOREST
M.U. 4
M.U. 4
M.U. 1
MOUNTAINS
M.U. 4
M.U. 4
M.U. 4
M.U. 4
ROUTT NATIONAL FOREST
LITTLE SNAKE R. A.
RIO BLANCO CO.
GARFIELD CO.
CRAIG DISTRICT
GRAND JUNCTION DISTRICT
ROUTT NATIONAL FOREST
ARAPAHO NATIONAL FOREST
COLORADO DIVISION OF WILDLIFE

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U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management

1989

RESOURCE MANAGEMENT PLAN

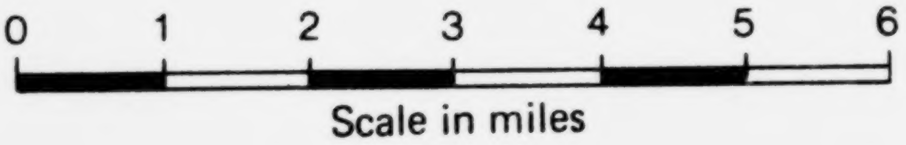
with

TRANSPORTATION PLAN

Little Snake Resource Area

CRAIG DISTRICT
COLORADO

March 3, 1849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Scale in miles

EAST 1/3

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management

1989

RESOURCE MANAGEMENT PLAN
with
TRANSPORTATION PLAN

Little Snake Resource Area

CRAIG DISTRICT
COLORADO

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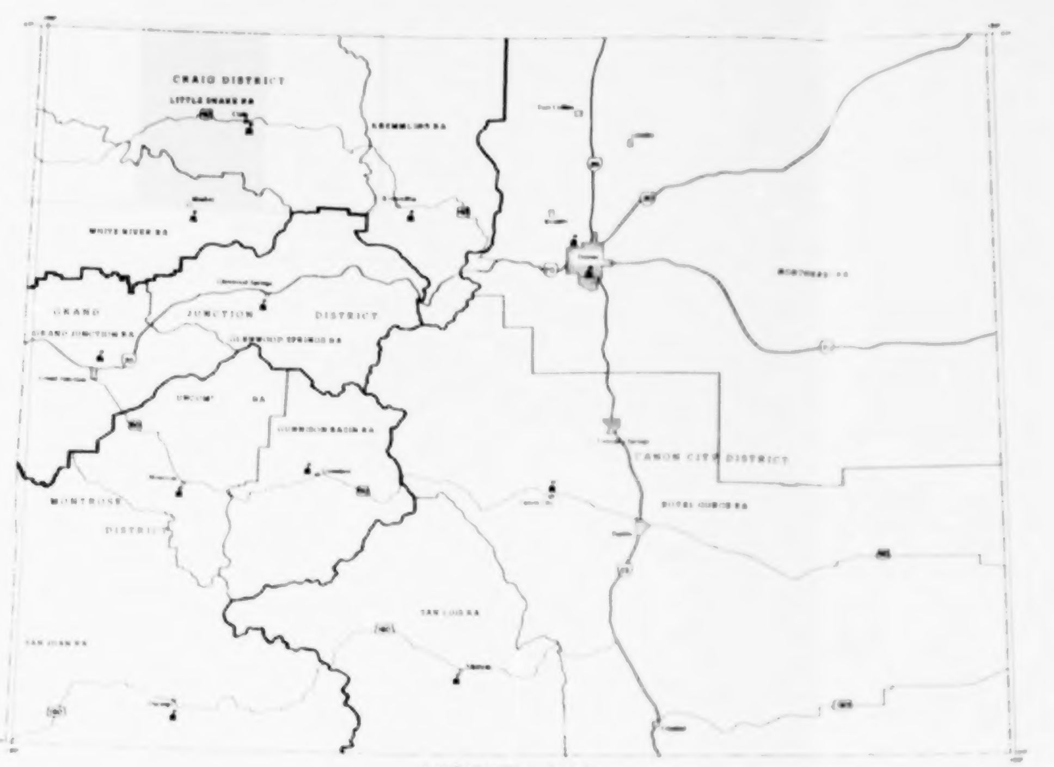
Scale in miles

CENTRAL 1/3

STATE OF COLORADO



VICINITY MAP

LAND STATUS LEGEND

- ☐ Public Lands (Administered by Bureau of Land Management)
- ☐ National Forest Lands
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- ☐ Bankhead - Jones Land Use Lands (L.U. Lands)
- ☐ Private Lands
- ▨ Resource Area Boundary

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LITTLE SNAKE RESOURCE AREA TRANSPORTATION SYSTEM*

Federal and State Highways
County Roads
**B.L.M. Roads and Trails
Other Federal Roads and Trails . . . NONE
† Private Roads and Trails

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M.U. 5	Douglas Mountain
M.U. 6	Northern Great Divide L-1
M.U. 7	Scattered Sands
M.U. 8	Axial Basin L-1
M.U. 9	Cold Springs L-1
M.U. 10A	Cross Mountain C
M.U. 10B	Diamond Breaks C
M.U. 11A	Little Yampa/Juniper Canyon L-2
M.U. 11B	Cedar Mountain L-2
M.U. 11C	Wild Mountain L-2
M.U. 12	Vermillion L-1
M.U. 13A	Limestone Ridge C
M.U. 13B	Irish Canyon C
M.U. 13C	Lookout Mountain C
M.U. 13D	Cross Mountain Canyon C
M.U. 14	Middle Mountain L-1
M.U. 15	Cross Mountain Foothills L-1
M.U. 16	West Red Wash L-1
M.U. 17	Willow Creek L-1

MAP LEGEND CODES
FOR OFF ROAD VEHICLE DESIGNATIONS

- Ⓒ Closed
- Ⓛ Limited
- Ⓛ-1 Existing Roads and Trails
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- Bridge; overpass; underpass
- Tunnel: road; railroad
- Built up area; locality; elevation
- Airport; landing field; landing strip
- National boundary
- State boundary
- County boundary
- National or State reservation boundary
- Land grant boundary
- U.S. public lands survey: range, township; section
- Range, township, section line: protracted
- Power transmission line; pipeline
- Dam; dam with lock
- Cemetery; building
- Windmill; water well; spring
- Mine shaft; adit or cave; mine, quarry, gravel pit
- Campground; picnic area; U.S. location monument
- Ruins; cliff dwelling
- Bathymetric contours: index; intermediate
- Stream, lake: perennial; intermittent
- Rapids, large and small; falls, large and small
- Area to be submerged; marsh, swamp
- Land subject to controlled inundation; woodland
- Route Marker: County; B.L.M.

Produced by
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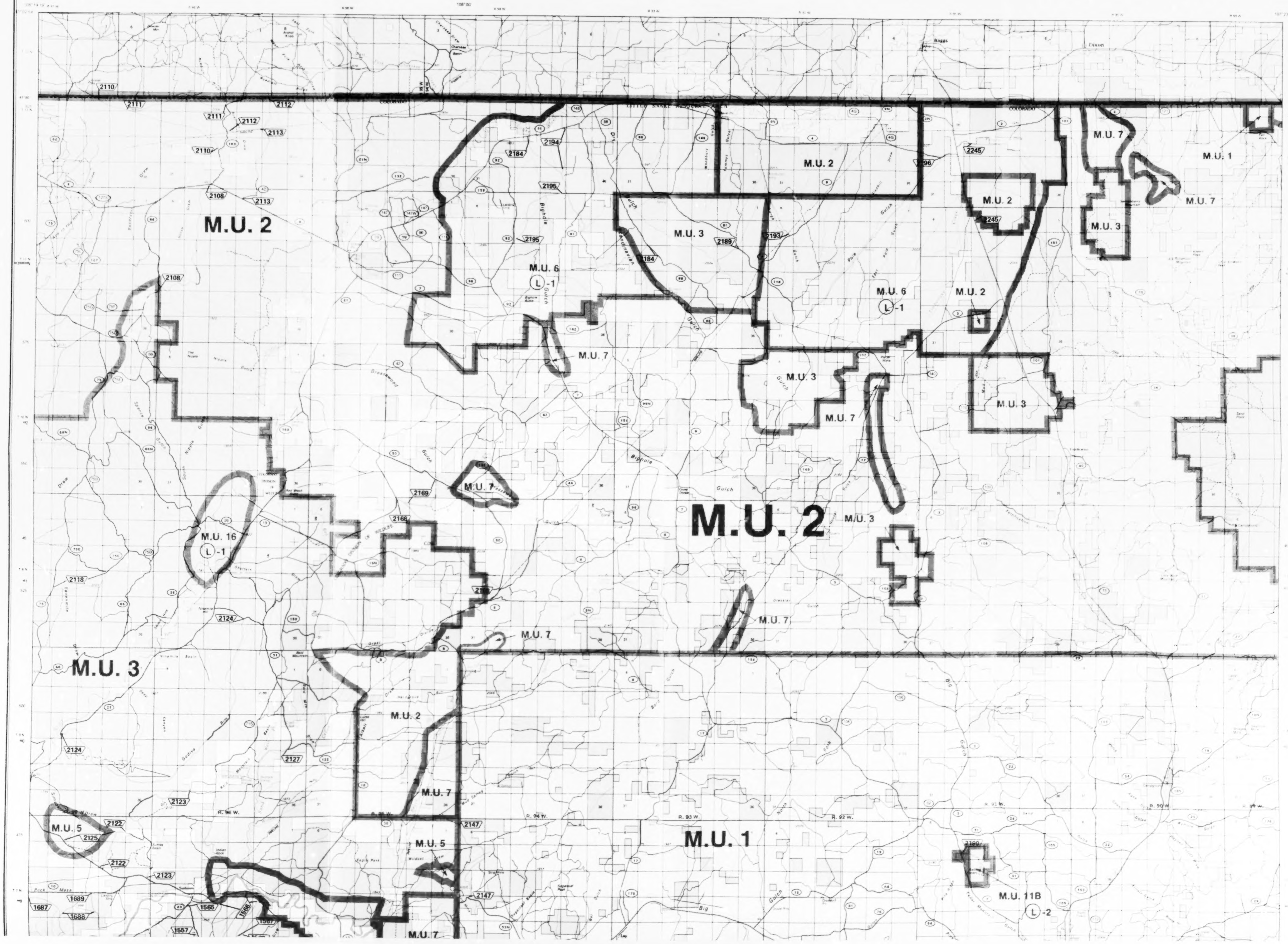

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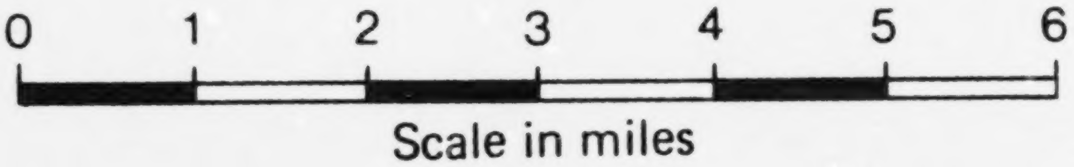
COLORADO

March 3, 1849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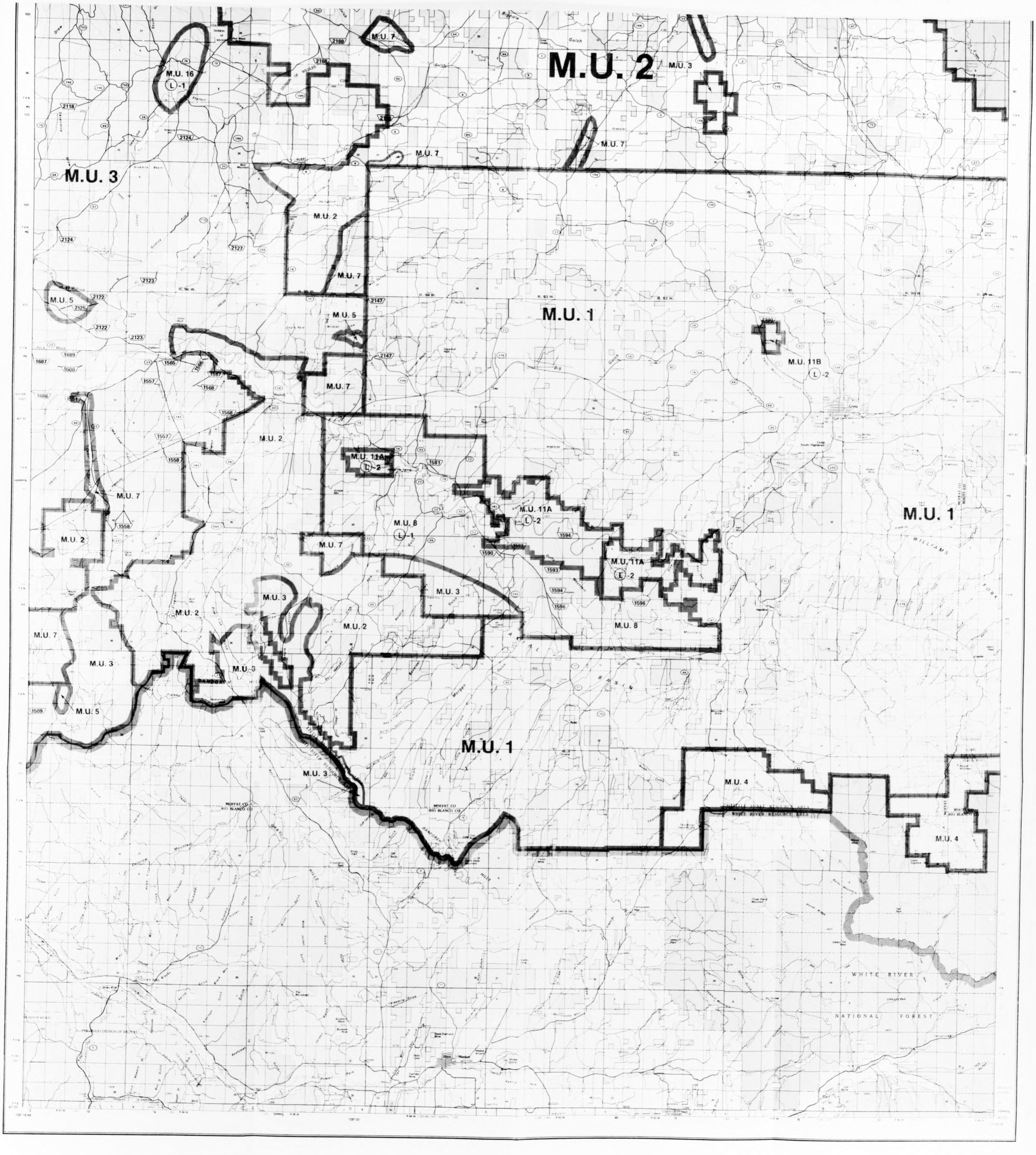
M.U. 16
L-1
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M.U. 2
M.U. 7
M.U. 5
M.U. 5
M.U. 1
M.U. 11B
L-2
M.U. 7
M.U. 2
M.U. 11A
L-2
M.U. 7
M.U. 11A
L-2
M.U. 8
L-1
M.U. 2
M.U. 7
M.U. 11A
L-2
M.U. 1
WILLIAMS
FORK
M.U. 3
M.U. 3
M.U. 2
M.U. 2
M.U. 8
M.U. 7
M.U. 3
M.U. 3
M.U. 5
M.U. 1
M.U. 3
M.U. 4
M.U. 4
MOFFAT CO
RIO BLANCO CO
WHITE RIVER RESOURCE AREA
WHITE RIVER
NATIONAL FOREST
Meeker
R. 94 W.
R. 93 W.
R. 92 W.

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Bureau of Land Management
1989

RESOURCE MANAGEMENT PLAN
with
TRANSPORTATION PLAN

Little Snake Resource Area

CRAIG DISTRICT
COLORADO

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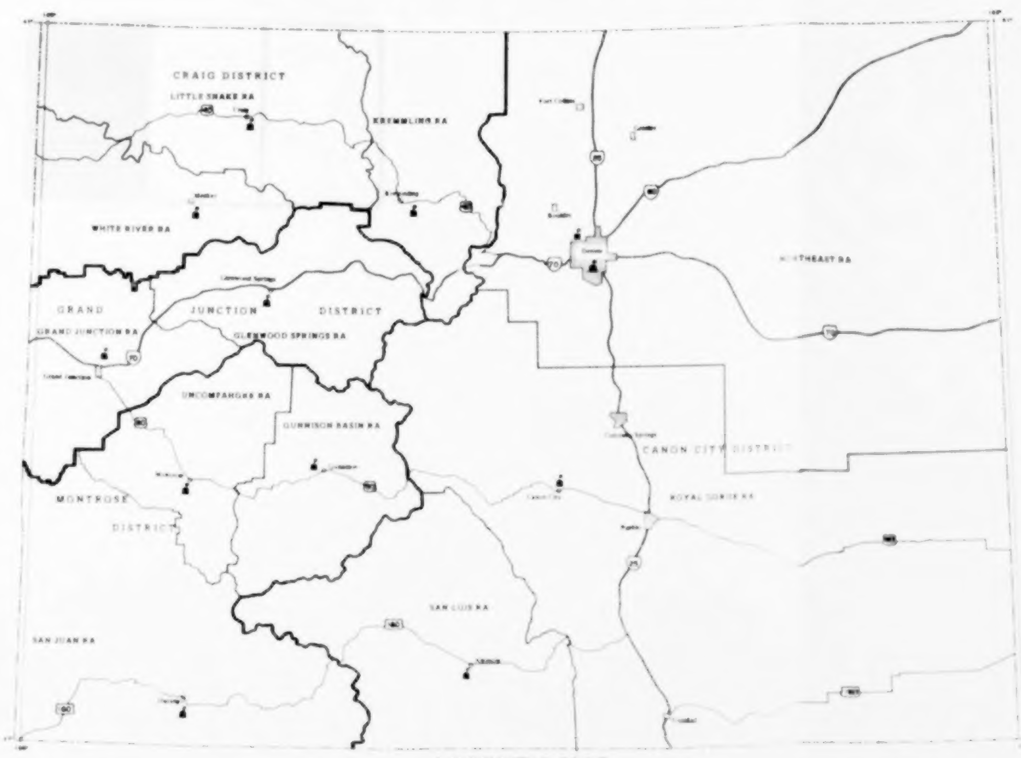
Scale in miles

WEST 1/3

STATE OF COLORADO



VICINITY MAP

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County Roads ....
**B.L.M. Roads and Trails ....
Other Federal Roads and Trails .... NONE
† Private Roads and Trails ....

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M.U. 2	Northern Central
M.U. 3	Little Snake River
M.U. 4	Eastern Foothills
M.U. 5	Douglas Mountain
M.U. 6	Northern Great Divide L-1
M.U. 7	Scattered Sands
M.U. 8	Axial Basin L-1
M.U. 9	Cold Springs L-1
M.U. 10A	Cross Mountain C
M.U. 10B	Diamond Breaks C
M.U. 11A	Little Yampa/Juniper Canyon L-2
M.U. 11B	Cedar Mountain L-2
M.U. 11C	Wild Mountain L-2
M.U. 12	Vermillion L-1
M.U. 13A	Limestone Ridge C
M.U. 13B	Irish Canyon C
M.U. 13C	Lookout Mountain C
M.U. 13D	Cross Mountain Canyon C
M.U. 14	Middle Mountain L-1
M.U. 15	Cross Mountain Foothills L-1
M.U. 16	West Red Wash L-1
M.U. 17	Willow Creek L-1

MAP LEGEND CODES FOR OFF-ROAD VEHICLE DESIGNATIONS

Ⓒ Closed
Ⓛ Limited
Ⓛ-1 Existing Roads and Trails
Ⓛ-2 Designated Roads and Trails

RMP USER NOTE

It is recognized that the management units depicted on this map include areas of private surface estate over federal mineral estate, private, state of Colorado, or other non-federal lands. The management unit prescriptions apply only to BLM managed surface estate or federal mineral estate. None of the management unit prescriptions apply to private, state of Colorado, or other lands not managed by BLM.

Planimetric Map Symbols

Primary highway, hard surface
Secondary highway, hard surface
Light duty road, principal street, hard or improved surface
Other road or street; trail
Route marker: Interstate; U.S.; State
Railroad: standard gage; narrow gage
Bridge; overpass; underpass
Tunnel: road; railroad
Built up area; locality; elevation
Airport; landing field; landing strip
National boundary
State boundary
County boundary
National or State reservation boundary
Land grant boundary
U.S. public lands survey: range, township; section
Range, township, section line: protracted
Power transmission line; pipeline
Dam; dam with lock
Cemetery; building
Windmill; water well; spring
Mine shaft; adit or cave; mine; quarry; gravel pit
Campground; picnic area; U.S. location monument
Ruins; cliff dwelling
Bathymetric contours: index; intermediate
Stream, lake: perennial; intermittent
Rapids, large and small; falls, large and small
Area to be submerged; marsh, swamp
Land subject to controlled inundation; woodland
Route Marker: County; B.L.M.

△ Bureau of Land Management Primitive Camping Sites
1 Bishop
2 Rocky Reservoir
3 Calloway
4 Irish Canyon

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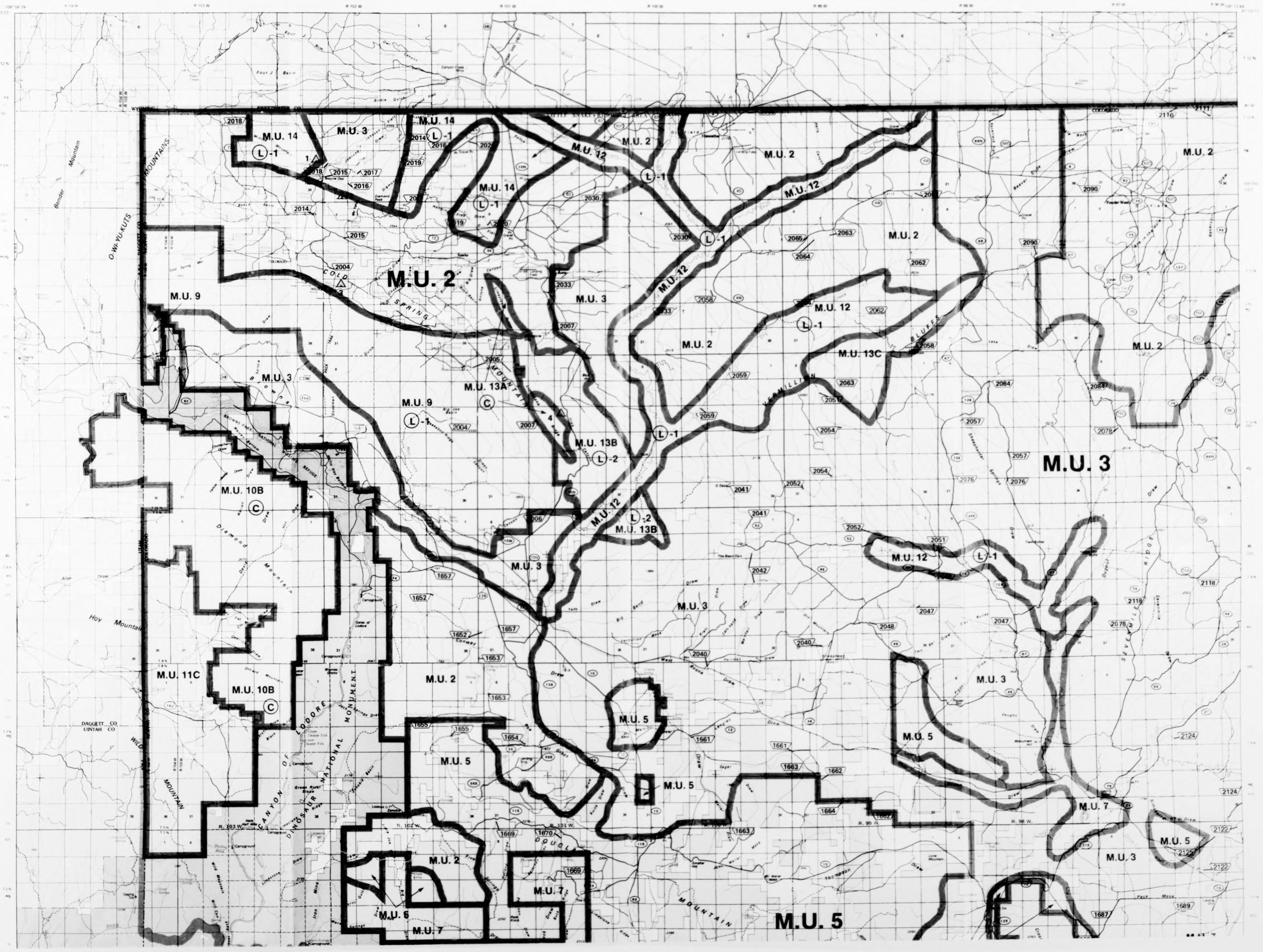

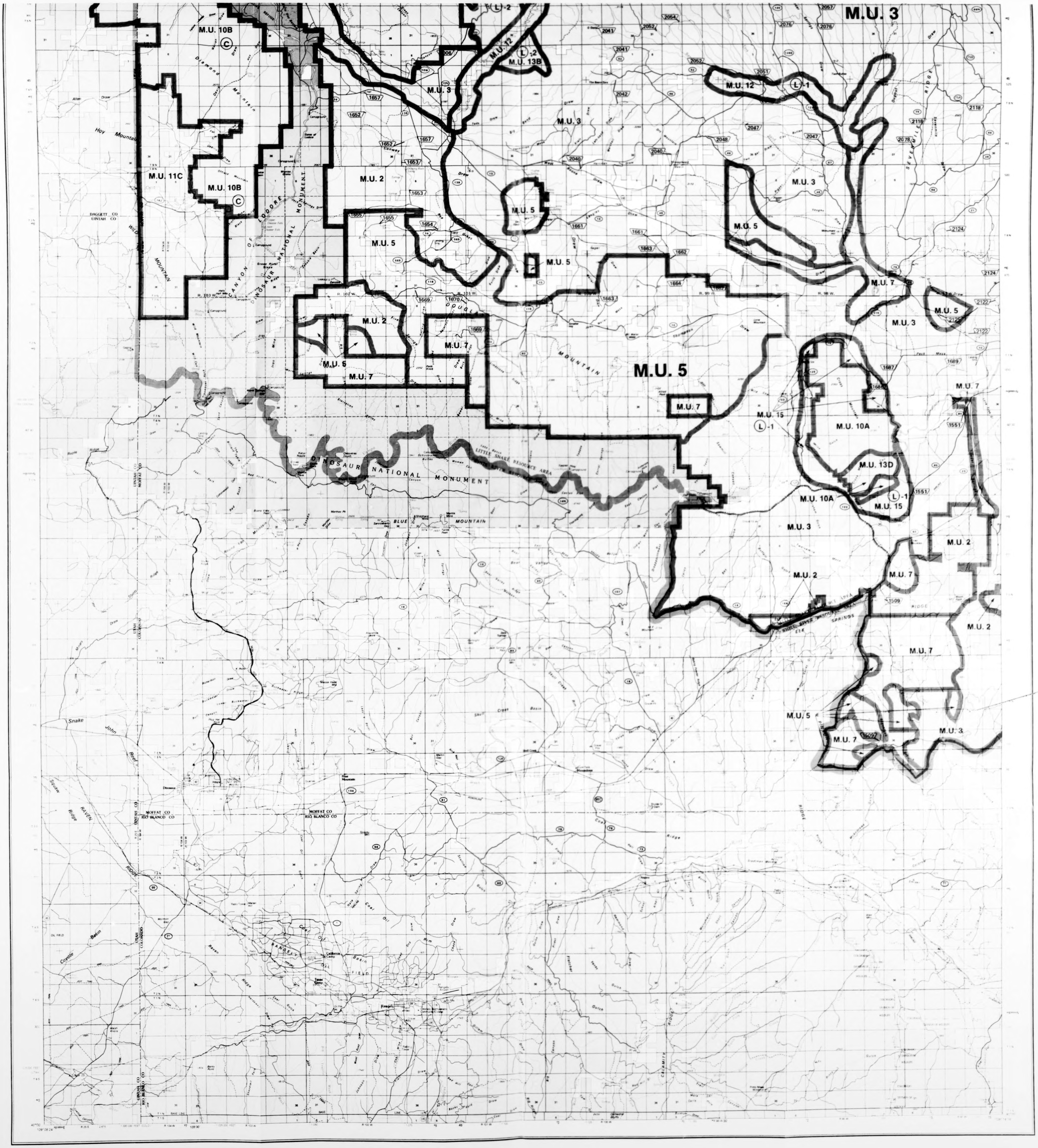
M.U. 3
M.U. 10B
M.U. 12
M.U. 13B
M.U. 11C
M.U. 2
M.U. 5
M.U. 7
M.U. 6
M.U. 15
M.U. 10A
M.U. 13D
L-1
L-2
C
DAGGETT CO
UINTAH CO
Hoy Mountain
Diamond Mountain
CANYON OF LODORE
DINOSAUR NATIONAL MONUMENT
DOUGLAS MOUNTAIN
LITTLE SNAKE RESOURCE AREA
BLUE MOUNTAIN
WHITE RIVER RESOURCE AREA
ELK SPRINGS
MOFFAT CO
RIO BLANCO CO
UINTAH CO
MOFFAT CO
RAVEN RIDGE
Snake John Reef
Coyote Basin
RANGELY
Coal Oil Basin
CALAMITY RIDGE
SEVENMILE RIDGE
Dinosaur

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